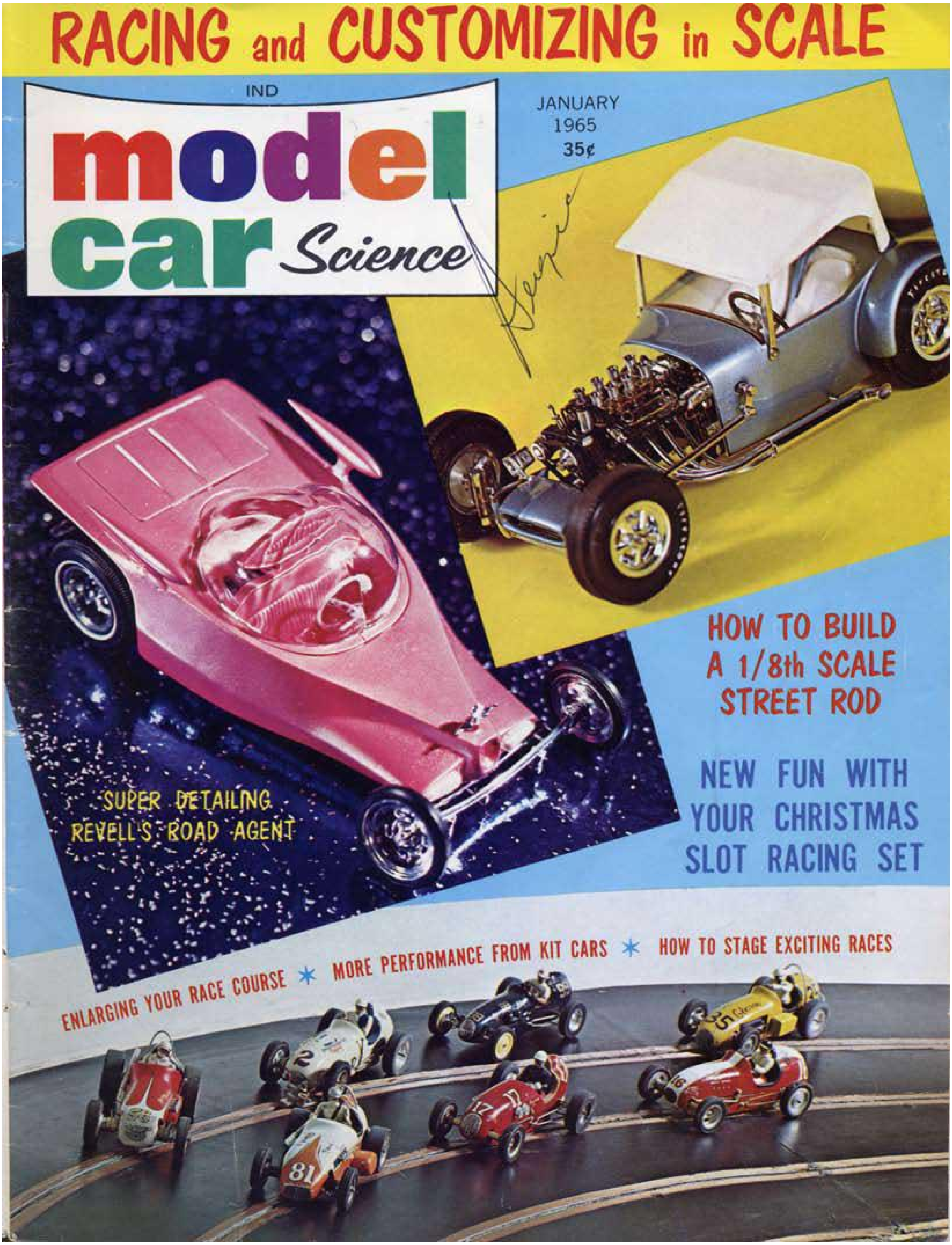

RACING and CUSTOMIZING in SCALE
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model car Science
JANUARY
1965
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HOW TO BUILD A 1/8th SCALE STREET ROD
NEW FUN WITH YOUR CHRISTMAS SLOT RACING SET
SUPER DETAILING REVELL'S ROAD AGENT
ENLARGING YOUR RACE COURSE * MORE PERFORMANCE FROM KIT CARS * HOW TO STAGE EXCITING RACES



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model car *Science*

Volume 3, Number 1 **January, 1965**

COVER — MCS staff photographer, Chan Bush has done it again! The blue roadster was the top winner in the recent Revell-Pactra National Custom Car Contest. While at Revell, Chan was able to preview their new Road Agent and take this exclusive photo. Complete information on super detailing the Road Agent is covered on page 18. The vintage Indy cars were photographed by one of the top photographers in the east, Robert Lavelle. The picture was made possible through the efforts of racing buff, Robert Clidinst, Jr.


EXTRA
AMT NEWS
EXTRA
THEY'RE HERE...THE NEW '65 MODELS FROM AMT!
The '65 Corvette Hardtop—AMT's version of the sassiest sports car on the road!
They're new, they're hot, they're here—those swinging '65's from AMT! Here's the line-up:
1965 CORVETTE HARDTOP ■ Chevy's sassy sports car! 3 ways to go! Custom, racing or drag. Wild features! Engine and components with speed options, hood scoop, exhaust lakers, slicks, drag fuel tanks, new drag hood, roll bar and parachute. Plus this fabulous first: ski rack complete with skis and poles.
1965 CORVETTE CONVERTIBLE ■ This versatile 'Vette Convert is all class! A 3-in-1 Customizing Kit with a whole flock of racing goodies: racing hood, air foil, windscreen and fuel injected engine. All this plus futuristic bucket seats, custom front and rear plus a custom hardtop for customizers! AMT's Sting-rays—hotter than ever for '65!
1965 BARRACUDA ■ Wow! For racing, the Barracuda bites the strip with a hot engine. Hood is complete with MoPar Hood scoop—the back with wild bucket seats, custom dash and console, custom wheels and Moon discs. Wait till you see the bouncy '65 Barracuda from AMT! 3-in-1. Stock, custom or racing.
1965 GALAXIE 500 XL CONVERTIBLE ■ Another 3-in-one standout from AMT! Features include steerable wheels, trunk and hood that open and close, custom grille, rear end and console and a chassis in super detail. Build with top up or down. For racing: cheater slicks, Cragar wheels, bubble hood.
1965 T-BIRD ■ Build this beauty 3-ways: Stock, custom, advanced custom. Kit has custom grille, rear end, head light covers and up-top. All-new custom interior with bucket seats. From quads to "chrome" jacks, this T-Bird takes off!
amt
Every part fits ... in AMT kits!
AMT CORPORATION • BOX 55 • TROY, MICH.
Breezy, bright and bouncy—the 'Vette Convertible for '65. Quality-built by AMT!
AMT gives a new look to a new good-looker—the Barracuda Fastback for '65.
Watch this new Ford go by on the road! Build AMT's fabulous '65 model in your home!
Some bird. Some car. Some model. AMT does it again with the 1965 T-Bird kit.

*** MODEL *** MAIL ****

PRESERVING DECALS

How do you keep decals from getting scratched off of slot racing cars? What is the best kind of spray paint to use on my plastic models?

John Havail
Lakewood, California

The best protection for scratches or ripped decals is to add a coat or two of clear enamel or lacquer after all detailing has been completed on your model. Just be sure to use the same type of paint used in finishing your model.

I honestly do not believe there is any outstanding paint product on the market, they are all good and will give acceptable results when properly applied. A lot depends upon personal preference as to the type of material and one's familiarity with it. I have had good results with all of them and my choice now is with whichever one has the particular color that is wanted.

WILL STROMBECKERS RUN ON ELDON TRACK?

I have an Eldon Road Race Set and I am wondering if a Strombecker slot car will run on this track.

Ricky Becker
Redwood City, California

It will run but not with the results you will be happy with. For some time now, all Strombecker cars have had 12 volt motors. Using this on a 6 volt track as your Eldon is powered with, you can see that its performance would be anything but interesting.

There is no physical limitation, just a case of power required. If you change to a 12 volt power supply most any 1/32nd car could be run on your track, but this would mean changing the motors in your Eldon cars if they are to last any time at all.

HEADLIGHT PROBLEMS

Dear Sir:

I have been having many problems with installing Ala Kart headlights under the fenders of my '34 Ford pickup without touching the wheels with the working light wires. How?

Bill McCows
Cliffside, PK, New Jersey

There just isn't enough room under the fenders of a '34 Ford to put any kind of a light. The Model "A" fenders on the Ala-Kart present the same problem that is why they are located in conjunction with the radiator shell. Your best bet is to find some other place to install your lights.

OVERSEAS REQUEST

I have admired the cars displayed in the MCS Contest and would like to know if modelers living in the Philippines can enter photos of their cars in this contest?

Emilio Nazano
Makati, Rizal, Philippines

We would be more than happy to have you enter our monthly contest Emilio, after all it's open to all readers of M.C.S. Building model cars is something we all enjoy no matter where we live, so feel free to send in your entry, just send us good, clear photos.

AC TO DC CONVERSION

I have an Aurora A.C. Road Race Set and I would like to know is it possible to convert it to D.C. If so what would I have to do and what do I buy?

Calvin Blankenship
San Francisco, Calif.

It can be done but may prove to be somewhat expensive as about all you will save will be the track itself. The AC motored cars will not operate on D.C., so they will have to be replaced as well as the power supply as it would cost more to try to convert it it D.C. operation.

VOLTAGES

I would like to know if I can run a six volt motor on a twenty-one volt track. My motor is from a Strombecker which I have enjoyed a lot.

Tom Carter
Pleasant Hill, Calif.

You can try, but I for one do not see why many persons want to run on stepped up voltages, other than for drags. On road courses it is the competition and fun of it, not excessive speed that counts. You will find cars much harder to control and motors will cook in no time. Perhaps improving your cars handling and control can put you in the winner's circle without going to excessive voltages.

continued on page 8



Everything is 1/24-1/32 scale but the action!

. . . and the action is king-size! Strombecker road racing accessories bring you more realism, more excitement, more fun, because Strombecker has the know-how.

Look for the Strombecker Accessory display at your hobby store or hobby department. Insist on official Strombecker road racing accessories and parts that help put king-size action into America's favorite hobby.



Midget Racers, the hottest thing on slot tracks today! And Strombecker started it with this beauty. Decals included are: Leader Card 110 Offy, Tread Master Special, Robert J. Shadday Construction Co., Willard Battery Special, Konstant Hot Special and Lloyd Rahn Special.

No. 9660 Midget 6/1 Racer, Built-Up . . . $5.95
No. 9460 Midget 6/1 Racer, Custom Kit. $3.95

Introduced in the spring of 1962, the G.T.O. became the sensation of all G.T. racing. And in so doing won for its builder, Enzo Ferrari, the Constructors Championship. With beautiful coachwork by Berlinetta, the G.T.O. is one of the most exciting racing cars ever to appear on the racing scene.

No. 9625 Ferrari Berlinetta, Built-Up. . . $5.95
No. 9425 Ferrari Berlinetta, Custom Kit. $3.95

Called the "Silver Stormer from Stuttgart," the Porsche RS 61 was developed as the personal project of owner Ferry Porsche. It features a horizontally opposed flat 4-cylinder engine. According to the racing crowd, the best bet to beat a Porsche in competition racing is another Porsche.

No. 9640 Porsche RS 61, Built-Up $5.95
No. 9440 Porsche RS 61, Custom Kit . . $3.95

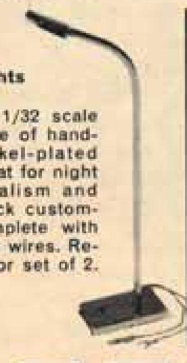


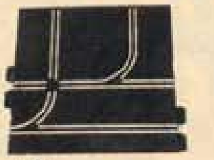
No. 9695 LAP COUNTER WITH TRACK

Combination track-side building and lap counter with observation seating area, scoreboard and windows. Specially designed track section enables lap counter to automatically record up to 99 laps without slowing cars. Hi-impact polystyrene construction. Retail $6.95 each.

No. 9170 Overhead Track Lights (Set of 2)

Authentic 1/32 scale lights made of handsome nickel-plated brass. Great for night racing, realism and overall track customizing. Complete with connecting wires. Retail $1.49 for set of 2.





No. 9230 LE MANS START

Most like real Grand Prix racing action! Track section fits anywhere on layout. Made of rugged hi-impact polystyrene. Finished in official asphalt black. Measures 14½" x 12½". Retail $3.00 each.



No. 9155 ASSORTED SPECTATORS (Set of 10)

Realistic 1/32 scale spectator assortment includes photographer, seated man, seated woman, man with raised binoculars, vendor, woman with binoculars. Retail $1.00 for set of 10.

STROMBECKER®



No. 9665 1/24 Scale Lotus Ford, Built-Up . . . $6.95
No. 9465 1/24 Scale Lotus Ford Custom Kit . $4.95

1/24 SCALE LOTUS FORD An authentic replica of the fantastic Lotus Ford Racer. It's the same car that won second place honors in the 1963 Indianapolis 500—and it's the favorite to take top honors in years to come! The big scale Strombecker Lotus Ford features 2-piece body construction, 4 brass bearings, interchangeable pin or rudder slot guide and powerful 12-Volt motor geared 4 to 1 for racing. Beautiful detailing throughout, including simulated suspension system. Complete with driver and customizing decals.

STROMBECKER MODEL ROAD RACING CLUB, Dept. AG4
4646 West Lake Street, Chicago, Illinois 60644

Please enroll me as a member of the Strombecker Model Road Racing Club. I have enclosed 50¢ for my official membership card, subscription to Table Top Topics, set of car numbering decals and 4 Strombecker racing tires.

Name________________ Age______

Address________________________

City__________ State______ Zip Code______

Model Mail *continued from page 6*

PICTURE TAKING PROBLEM

I consider myself a pretty fair model builder. I wish to enter my models in a contest or in your magazine. My problem is that the hobby shops close to me are just interested in slot racing and don't have any contests for custom built models. I've tried taking pictures of my models, to find out our camera can't get close enough to the model or it will be blurred. What I need is a camera with a close-up lens and I don't know anyone with such an outfit. Any ideas or answers you have would be very valuable to me because I would like to receive some recognition for my model building. I wouldn't mind mailing my models in.

Bill Mitchell
Long Beach 7, California

What you need most is that close-up lens for your camera so that you can get close enough to the models without having your pictures turn out blurred. A close-up lens of average quality usually sells for about $2.50 and it is well worth the price.

CLUB RULES CLOBBERED

We have just started a model car club and have run into problems galore — the main one being rules. I believe that if we were to enforce them, our club would break up.

If any of your readers have any suggestions, or better yet, anyone who has already started a model club and run into problems, would he care to drop me a line? My address is: Bruce Millington, c/o "The Little Ones," 324 Quinn Blvd., Longueil, Quebec, Canada.

We would also like to exchange courtesy cards with clubs in the United States and Canada. Thanks for a really great magazine and keep up the good work.

Bruce Millington
Longueil, Quebec
Canada

LINDSEY MOTORS

Where can you buy Lindsey Motors? If you know of any mail order house that carries them or even better the company that makes them I would appreciate their address.

David Thompson
Hamden, Conn.

Let's put it this way: If you find out where even a good used Lindsey may be hiding, let us know. They are as hard to come by as the proverbial hen's teeth. Bob Lindsey quit building motors commercially before Model Car racing became the great hobby it is today. All of his designs were basically to provide power for model trains, and have long since left the dealers shelves. Once in a while you hear of some one that wants to sell one, but believe me, not often.

HO FANS TALK BACK

First, I would like to compliment MCS for the fine job you have done. Thanks for coming to the rescue of us modelers.

Everything in the magazine is excellent except the table top racing section. The whole section is about 1/32 and 1/25 scale slot racers. You leave out the heart of slot racing: the HO scale racers.

Now I think you will agree with me that there is a need for 1/87 scale racers in your slot racing section. I can supply you with sufficient information and pictures as I am building a combination Aurora — HO layout. It will have street lights and lights in every building, all electrically controlled. It will be fully landscaped and realistic.

Marc Ehrens
Mexico City, Mexico

MCS is always on the lookout for new track ideas and welcomes articles and pictures from anyone that has an interesting layout.

In your article in the April issue of MCS titled "More Go For HO" I found, according to the author, that Aurora vibrator cars are all but extinct. I would like to prove otherwise.

First, vibrators, though some are noisy, are much more realistic in their speed. Jets go 600 mph, not cars! Even though they are slower, vibrators can hit 180 scale mph without buying a single part, and with drag slicks as much as 250 scale mph can be attained. Other advantages include its cornering ability and the fact that you can adjust them for almost pure speed or raw power or anywhere in between. With proper care, a car can last for years, only replacing road brushes once every year or so, if you do a lot of driving.

Still, the article was informative and I am looking forward to more like it.

Edward Bianchi
Drexel Hill, Pennsylvania

MSC CONTEST FOR FAIRER SEX?

In reading the MCS contest rules, I noticed there were no specifications as to age or sex. The reason I am concerned is because I have been building models of all sizes and types for over five years. I have never entered a contest because I always felt that it was a male's hobby. I am 23 years old, a female and very much interested in entering this contest. I am also an amateur photographer (another one of my hobbies). If I am permitted to enter this contest, please let me know.

Barbara Snyder
New York, New York

The MCS contests are open to any serious model builder, anywhere in the world and we'd love to see the "fairer sex" show up some of the male modelers.

Winningest Pair!



Two New 1/32 Scale Slot Racers by Monogram
Designed for Realism—Engineered for Winning Speed



Cooper-Ford

Rear-engined sensation that swept the two U.S. richest racing events.

$5.98



Monogram — the NAME FOR *Quality* HOBBY KITS

Porsche 904

First in class at Daytona and Sebring. Overall first and second at Targa Florio.

$5.98

Enjoy slot racing at its wonderful best. Here are the year's two big sensations — right from the road and track into your own racing fun and enjoyment. Like all Monogram racing models, the Cooper-Ford and Porsche 904 have all the speed you can use and performance and handling to make you happy. Also, the last touch of realism, found only in these models.

Check the features of these new and complete kits. High-impact one piece upper body—Tiger X-100 hi-speed racing motor—clear windscreen, windows and headlights—Tiger traction racing tires—light weight sturdy brass frame—light weight precision aluminum wheels with plated insert hubs—precision steel gears—steel axles with machined threads—Nylon pickup with braided wire brushes—Talbot racing mirror—racing driver and extra skull head—bronze bearings and authentic racing decals. Assembly is easy—no painting or finishing required.

See the new Cooper-Ford, Porsche and other fine Monogram racer models at your favorite store.

OTHER MONOGRAM SLOT RACER MODELS

Monogram Models, Inc., Morton Grove, Ill.

1/24 SCALE $6.98 • 1/32 SCALE $4.98

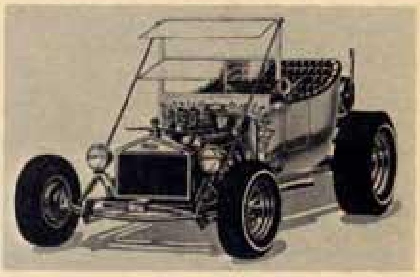
Deuce Roadster • 1/32	'36 Ford Coupe • 1/24	'40 Ford Pickup • 1/24
MGA Sports Car • 1/32	'55 Chevy Hardtop • 1/24	Duesenberg • 1/24
'34 Ford Coupe • 1/24	'58 Thunderbird • 1/24	Mercedes 540K • 1/24



NEW TO SCALE



Independent front suspension that really works is featured in a '65 Corvette offered by Model Products Corp. Actual flexible coil springs give all the feel of the real thing. Other highlights of the 1/25 scale Corvette by MPC include a 6-in. ribbon chute, a super-detailed driver and a one-piece body. The kit can be built as a drag car, road racer or sports car, or it can be converted for slot racing.



A 1925 Model "T" Ford is the latest addition to AMT's popular "Trophy" series of kits. The "T" comes with all of the components needed to build it as a roadster or coupe, in stock or all-out rodding form. For those who chose a rod version, the $2.00 kit includes a big Lincoln engine with ram stacks, six two-barrel carbs, log manifold, Latham blower and competition exhaust headers.



Just introduced by Hubley is this 1931 Model A Ford Victoria. The metal kit has 44 parts, most of which are a die cast metal. The seven and a half inch long car is authentically scaled and is rugged enough for considerable abuse. The original cost of this car was $580.00. Look for the cheaper model of it by Hubley in your hobby store now.



Three exclusive metalflake mist colors: Gold Mist, Silver Mist, and Bronze Mist, are now available under the Pactra label. With a lacquer-fast drying time, these new additions join ranks with Pactra's seven existing metalflake colors: Blazing Red, Sparkling Burgundy, Shimmering Green, Star Blue, Lightning Purple, Radiant Lime and Lustrous Turquoise. Each can holds 85 grams.

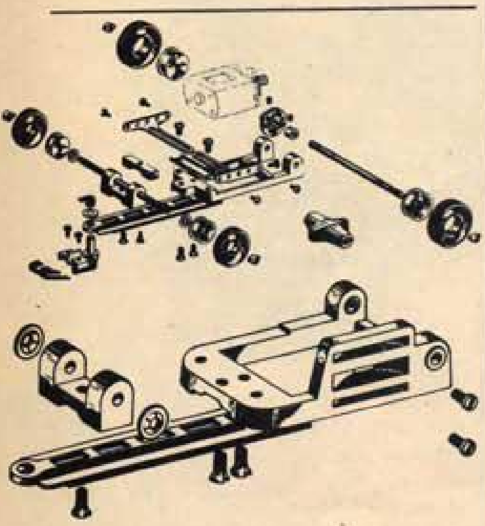


Everything needed to operate a backyard or garage racing oval is combined in this new 37-foot track and car package from L.M. Cox Mfg. Co., leading manufacturer of ready-to-run gas powered planes and cars. The package contains two fully assembled Corvette Sting Rays, two Cox accessory kits with fuel, starting battery, clips, and wrenches.





Two of the hottest Revell items this year have joined forces to provide some of the most unique model car racing packages ever created: Mr. Gasser in a 1/24th scale BRM., and Rat Fink in a 1/24th scale Lotus-Ford. These two $6.00 kits offer the same competitive racing features that exist in other Revell racing kits, including the SP-500 motor, precision machined aluminum wheels and threaded metal axles.



Two new slot racing chassis appear in the latest catalog from Dynamic Models, Inc., Dept. MCS, 13755 Saticoy St., Van Nuys, Calif. The catalog, which is available by mail for 10 cents, shows the 552 rolling frame for Revell SP-500, Russkit 22, Monogram X-100 and Aristo motors, a unit containing more than $8.00 worth of Dynamic parts but which sells for only $4.95, and the 667, a complete chassis for higher-powered motors like the Kemtron X-503 and Mini-Auto KTM-DV 18E.

continued on page 12

Complete Your Collection Of Model Car Science

YOU'LL WANT TO READ TIMELESS ARTICLES

APRIL, 1963 — Complete info on building a slot track and motorizing models.

JUNE, 1963—Big survey on slot racing motors plus a full report on slot drag racing.

SEPTEMBER, 1963—Complete coverage of tires and wheels . . . Full reports on cementing and vacuum forming.

OCTOBER, 1963—Valuable tips on independent rear suspension and hinging early Ford doors.

NOVEMBER, 1963—Detailed report on fiberglass bodies and how to power them.

DECEMBER, 1963—Buyer's guide to How to make magnetic doors and new models and accessories . . . drag chutes.

JANUARY, 1964—Exclusive instructions on building the X-15 dragster . . . Tips to put new zing in Strombecker cars.

FEBRUARY, 1964—New ideas on how to start a club, styling and painting for prizes.

MARCH, 1964—Complete report on Revell slot cars . . . Special feature on dream cars.

APRIL, 1964—Complete info on the $117,000 Fisher Body contest . . . Track test on Eldon cars.

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JULY, 1964—Build your own scale Cobra . . . How to judge contests . . . Simplify your racing schedule.

AUGUST, 1964—Sensational plans for a tow truck . . . Slotting for fun and profit.

SEPTEMBER, 1964—Dream cars from Detroit . . . Slot motors: the fastest — the strongest . . . The case for HO.

OCTOBER, 1964 — Fisher Body contest winners and Monogram's new slot cars are highlighted.

NOVEMBER, 1964, — Pictures of all the Revell-Pactra Contest winners and loads of budget racing hints.

DECEMBER, 1964 — The Annual Buyer's Guide to the latest modeling equipment.

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171 BARRINGTON PLACE, LOS ANGELES 49, CALIFORNIA

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I INCLUDE 50¢ EACH, WHICH ALSO COVERS THE COSTS OF MAIL AND HANDLING

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☐ SEPT '64 ☐ OCTOBER '64 ☐ NOVEMBER '64 ☐ DECEMBER '64

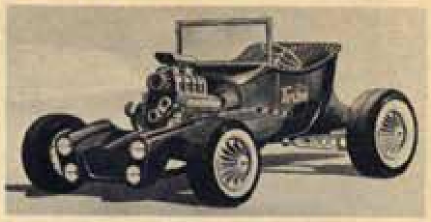
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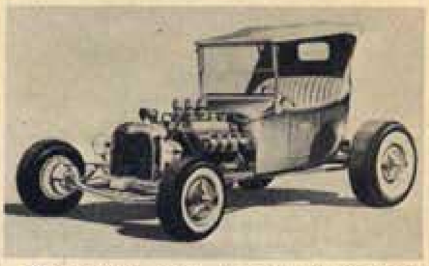
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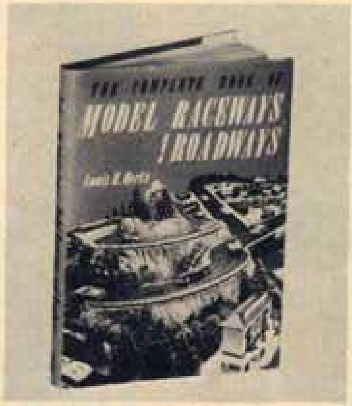
NEW TO SCALE

continued from page 11





You won't have to save very much Confederate money to add these great new Pyro rods to your 1/32nd scale collection. The Rebel Sho-Go roadster features a roadster top, drag chute, custom '32 Ford radiator, Buick 401 mill, triple carbs and bell pipes. The Texan, a custom street rod, has a Model "T" roadster body, Chevy 283 engine, quads, custom front end, quick change rear, and drag slicks. Take your pick at 50¢ each.



Here's a book that belongs in every modeler's library for handy reference. Whether you buy ready-made tracks and cars or build your own, the author shows the many exciting variations available in layouts from HO to 1/24 scale, plus scenic effects and accessories that defy the imagination. This 224 page, cloth-bound book is available from the Delta Book Club, 171 S. Barrington Place, Dept. MCS, Los Angeles, Calif. 90049. Price is $5.95, California residents add 24¢ sales tax.

ORDER-BY-MAIL
Use Handy Order Blank on Page 15

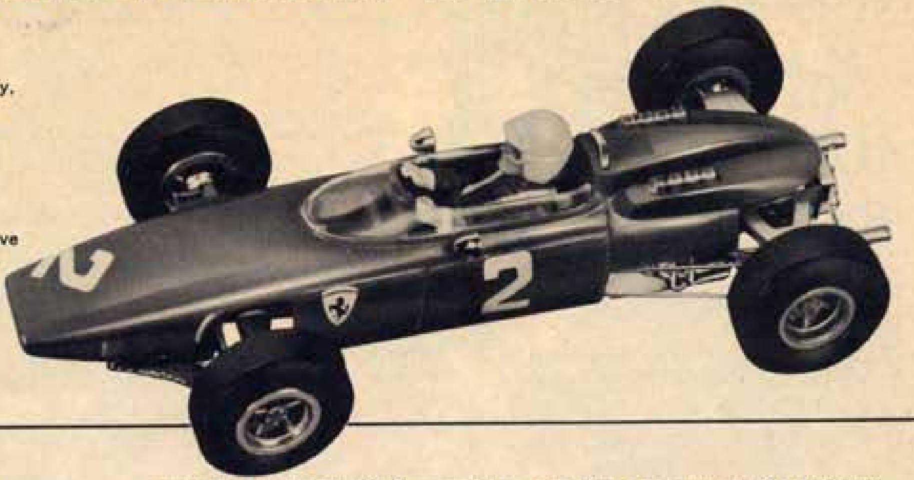
PRECISION SCALE!

1964 FORMULA I FERRARI & BRM CAR KITS

1:24 SCALE Ferrari

FERRARI! The name roars with racing glory, and Cox craftsmen have caught the sleek lines, precision details, and SPEED of this Grand Prix Champion in one of the most perfect kits ever built! Each precision-machined part is as close to ACTUAL SCALE as racing wear and tear permit. And the Monocoque Construction, exclusive with Cox, which holds the motor and rear axle assembly in ONE unit is a direct reproduction of its big prototype design. Get the extra speed and realism of a PRECISION SCALE racer—in a new COX FERRARI!

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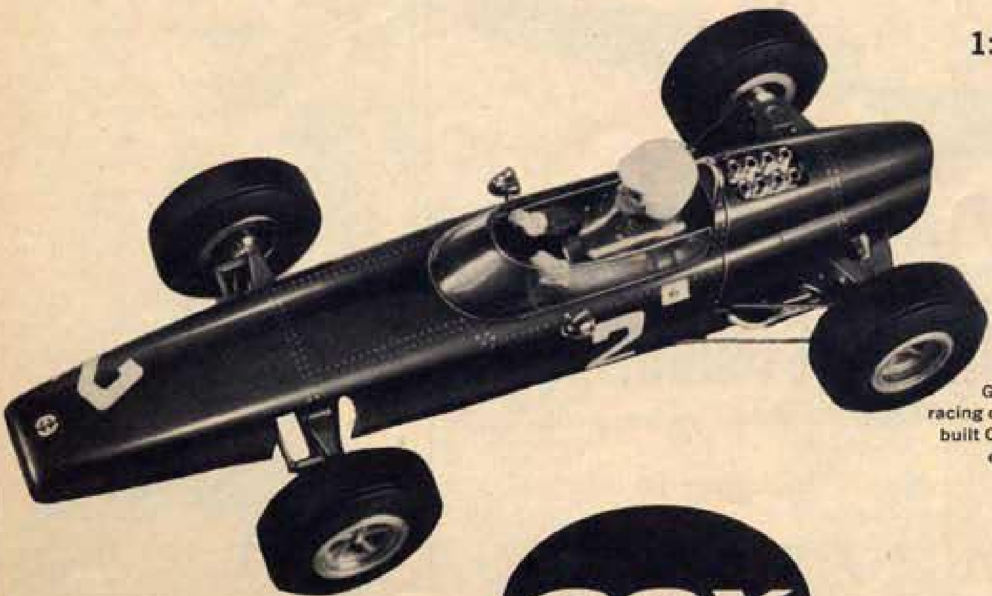


Look for this box at your Dealer's

QUALITY METAL PARTS! Cox precision scale kits are made by Cox precision machinists, men who are specialists in miniature METAL parts. The FERRARI and BRM models are built from the chassis UP, not from the plastic body down. Holder of more gas model engine records than any other maker, Cox offers you quality—quality that puts new excitement and authenticity in slot car racing!

A FEW OF THE QUALITY FEATURES

Genuine magnesium wheels, facsimile detailed, lightweight • Dunlop type racing tires—maximum traction • Crash resistant sprung front end • Axles concentric within .001"! • Die-cast lightweight magnesium motor and rear axle carrier with precision line-reamed bearings for perfect alignment • Hi-Speed Competition I Motor—Superflex wires • Carefully detailed driver and accessories.



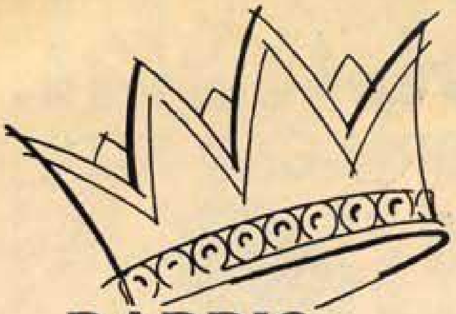
1:24 SCALE BRM

The beautiful BRM has been the favorite of International Trophy Winner Graham Hill. The COX BRM model is as accurate and finely detailed as a fresh new bill! Cox precision scale means more than surface beauty—it means added speed and performance because building to scale demands greater accuracy in every part, better materials in many critical parts. Get the extra pride and satisfaction racing can now bring you with a precision-built COX BRM AND FERRARI—both with exclusive Monocoque Construction.

ea. **7.98**

COX

L. M. COX Manufacturing Co., Inc., P.O. Box 476 Cox Center, Santa Ana, California • Write for Complete Illustrated Catalog



MCS takes pride in announcing this exclusive, new column by the "King of the Customizers" George Barris, owner of Barris Kustom City in North Hollywood and technical advisor to A.M.T., The Ford Custom Car Caravan, plus many motion picture studios and television programs. In this monthly column, George will offer many useful modeling tips which have, up to now, been trade secrets.

BARRIS KUSTOM KORNER



IN MY PLANS for this column throughout the future issues, I will try to please you all by providing a world of helpful, new and interesting facts for customizing your models. I am also going to ask for your participation in this Barris Kustom Korner, to add a slightly different flavor. I want to encourage everyone to write in and let me know what you like, what you don't like, helpful hints that you have used successfully, and even your own great ideas on how to customize models.

I will also be reporting on several of the new model releases and will attempt to offer many of our proven ideas on how to customize your own dream cars.

This column will keep you informed of all the inside activities at Barris Kustom City: what we are building, the new and creative ideas that are on our drawing boards, what we are planning for the future, plus what we are doing for the ever-growing auto industry. We want you to be informed on all future big car plans so that you can apply these ideas to your own models.

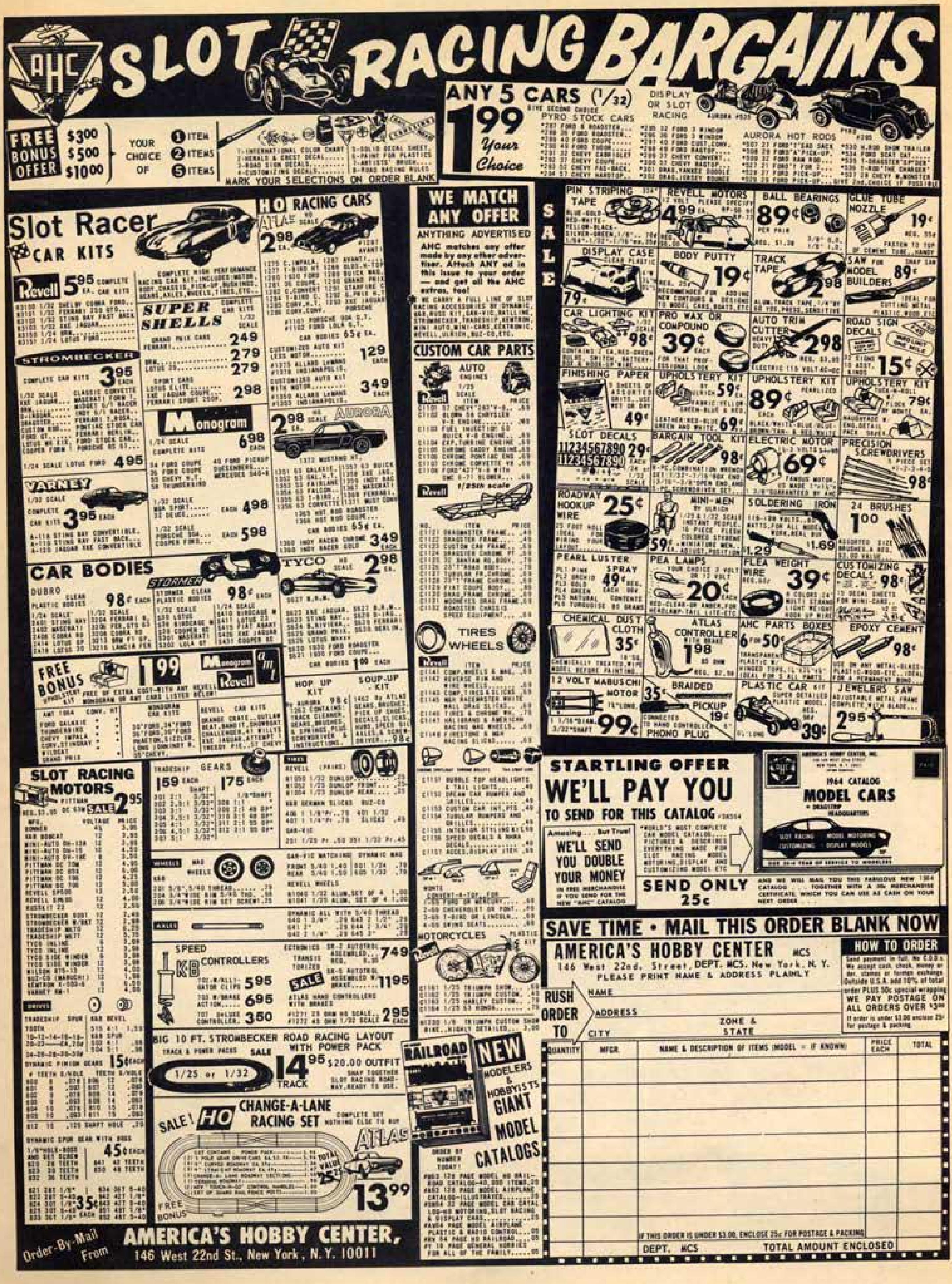
You will also be kept posted on all our new TV and motion picture filming activities with such cars as the Munster Koach, Villa Riviera and the Surf Woody.

Yes, I will even be bringing you the latest news of all the movie stars that we build cars for and just what each star prefers for his own special accessories. I know this will be quite interesting to you.

You can expect to be reading exclusive How To Tips, and we will take you into several model contests throughout the nation. We will also cover the Rod & Custom shows (where I will be making personal appearances for the Ford Custom Caravan as their custom advisor). If you should see me at any of these shows, please feel free to come up and ask me any question or just say hello. I'd be glad to help you with whatever I can or to just shake your hand and say hi.

You'll be seeing lots of goodies and wild new ideas in many of the new A.M.T. kits which I will also be discussing in this new column.

I'm here to please you, so feel free to drop me a note c/o Model Car Science, 171 S. Barrington Pl., Los Angeles, California, 90049.


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FIRST REPORTS
BIG NEWS IN CAR KITS

For 18 years, the name Cox has been synonymous with quality in engine powered models. Now, after studying the needs of slot racers, they have put one of the largest research and development departments in the industry to work on this project and have come up with an all-new line of competition car kits and components that will delight every buff that demands perfection in both authenticity and performance.

Two Grand Prix cars, a '64 Ferrari and a '64 BRM (both in 1/24th scale) lead the parade of new items. The body supports all mechanical components of both cars, doing away with the frame. In addition, both cars feature a magnesium motor and rear axle carrier with precision line-reamed rear axle bearings, crash-resistant, sprung front axle, spring-loaded drop pickup with specially designed flag, die-cast mag wheels, super-traction Dunlop racing tires and a rugged Competition I Motor.

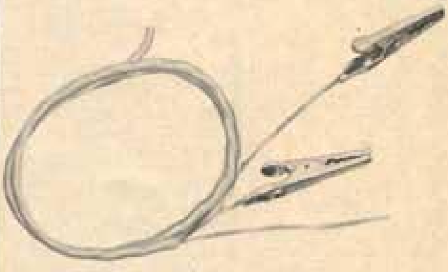
Instant response and smooth acceleration is promised with the new Cox Mark 3 pistol grip controller that sells for $6.95 and features dynamic brakes. Other items in the line include a $3.95 adjustable chassis for Pittman 704, 705, 706 or Ram 426 and 426A and similar motors, that has a weighted swinging arm pickup, a replacement resistor cartridge for the controller, controller cable, a weighted swinging arm, and pressure-sensitive, adhesive-backed braided wire that is easily applied to any track surface. Both hard and soft super slicks of new formula sponge rubber, mounted on aluminum non-slip hubs, are also being offered in both 1/24th and 1/32nd scale.



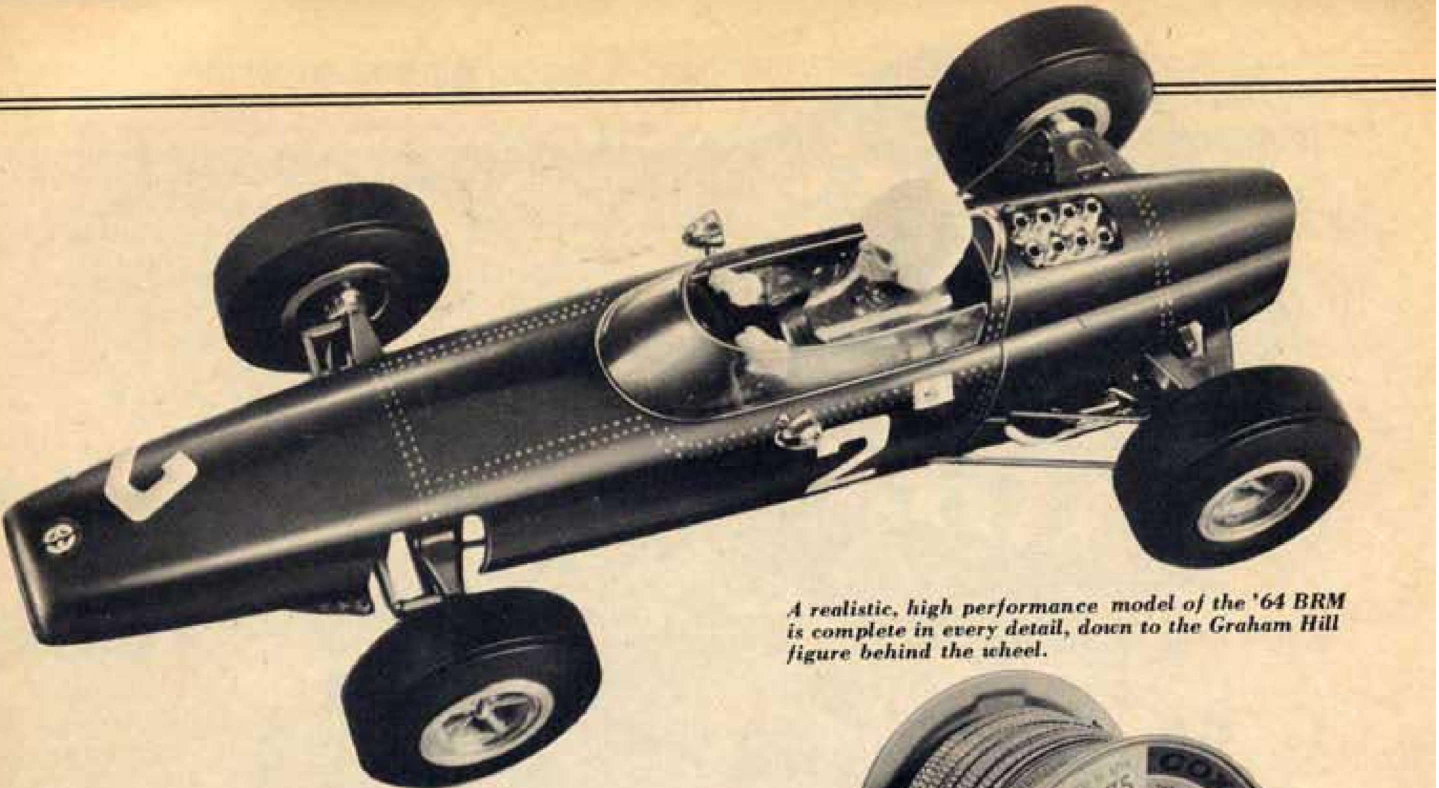
Dynamic brakes, color-coded wires and large alligator clips are included with the new Mark 3 controller by Cox.



Precision-built with custom quality parts, this 1/24th scale Grand Prix Ferrari is ready to challenge all comers.



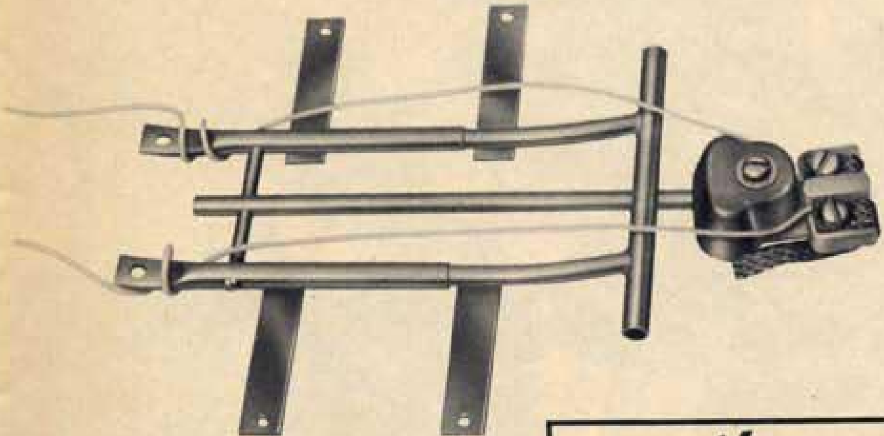
The Cox controller cable has three color-coded wires, alligator clips ,and a flexible yellow jacket to reduce wear and brakage.



A realistic, high performance model of the '64 BRM is complete in every detail, down to the Graham Hill figure behind the wheel.



Simply lay this tape in place and iron it down, and presto, instant track. This Stik-Track is very easy to install



Track-proven, this adjustable chassis is designed to handle the Pittman 704, 705, 706 or Ram 426 and 426A and similar motors.



Four sizes and two shore hardnesses are offered in the new Cox line of formula sponge rubber racing tires.

ROTH'S ROAD AGENT

WITH THE ROAD AGENT taking center spot on the current custom car show circuit, handled by Promotions Inc., it appears that Ed Roth's Star has completed a full orbit. As you all know, it was the Outlaw that first brought him to prominence and now Road Agent adds to that fame. You would almost think that he lived on the wrong side of the law as he has been known to associate with a character known as the Beatnik Bandit as well as the two desperados mentioned. However, not all of his friends have this background. The others spring from his fertile imagi-

Revell's Newest 1/25th Scale Desperado

by Norm Roberts

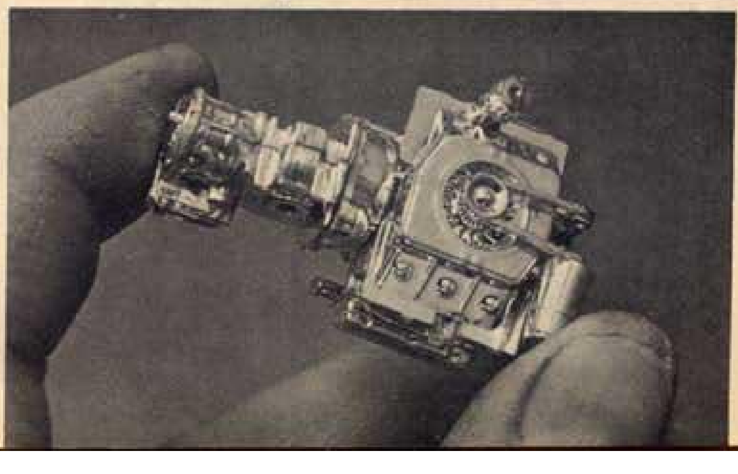




A. Attention to detail is evident in every piece of the air cooled Corvair engine. A total of twenty-three individual parts are required to complete the engine assembly.



B. Use a small swiss file and a lot of patience, and the blower fan belt can be much improved by thinning. Leave a shoulder in pully areas to be more authentic as shown on the left.



C. It's a little jewel when assembled. For those interested in picking up contest points, now is the time to add that fine detail such as wiring, fuel lines and throttle linkage.

nation to adorn the back of more sweatshirts than we care to think about. But enough of this gentleman of the white tie and tails we all see at the shows; let's move into the construction of this, his latest creation, the fifth to be reproduced in all its detail by Revell.

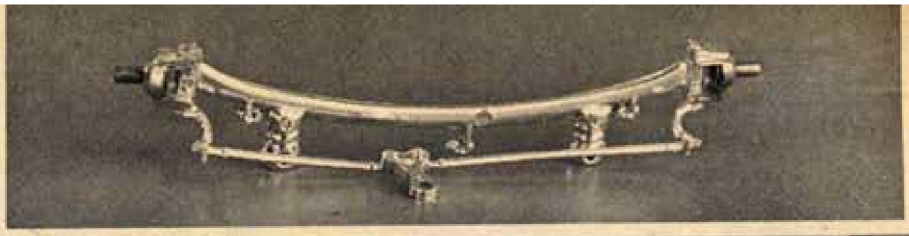
After seeing the Mysterion with not one, but two big mills, with more chrome on them than most custom shops keep in stock, the logical progression would dictate the next one should have more chrome and larger engines, but what do we find up front, nothing but an old style temperature gauge called a Motometer rendered inoperative as the motive force now installed in the rear is air cooled. Quite a switch for "Big Daddy!"

Upon opening the kit you will find a wealth of finely detailed parts on the very compacted chrome tree. In fact, following the instructions, you will have a complete rolling chassis with motor before you even touch the body parts which are molded in white plastic.

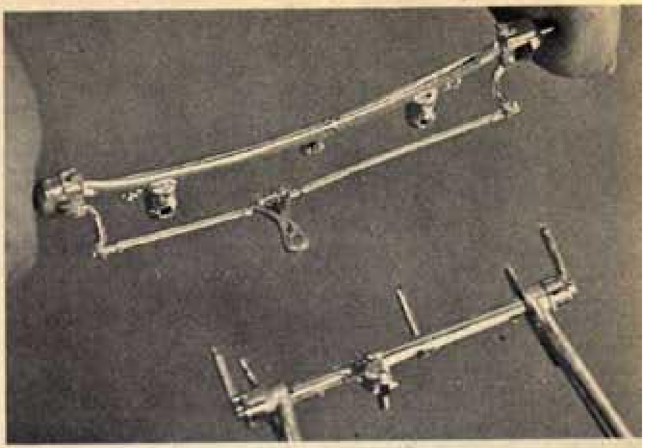
Following the instruction sheet sequence of assembly, the air cooled Corvair engine is the first unit put together. It is an excellent job of reproduction and in itself contains twenty-three highly detailed parts and makes a truly authentic power plant when completed. For those interested in adding more detail, we would suggest a little flat black paint between the vanes of the blower and fins on the cylinders as well as the fan belt. The size of the fan belt can also be reduced in cross section area using small files and a lot of care. Additions can be made in the way of wiring and throttle linkage for those interested in super detailing, but is more than acceptable in its present condition, so set it aside and start on the frame.

The basic frame consists of two tubular side members, three tubular cross members and the Corvair rear cross member. Use care in removing the plating on the locaters which must be done to obtain a proper glue joint. Since this is the back bone of the car all joints must be strong. Allow plenty of time for this assembly to dry before adding the next assemblies since you could distort it by handling if glue has not had sufficient time to dry.

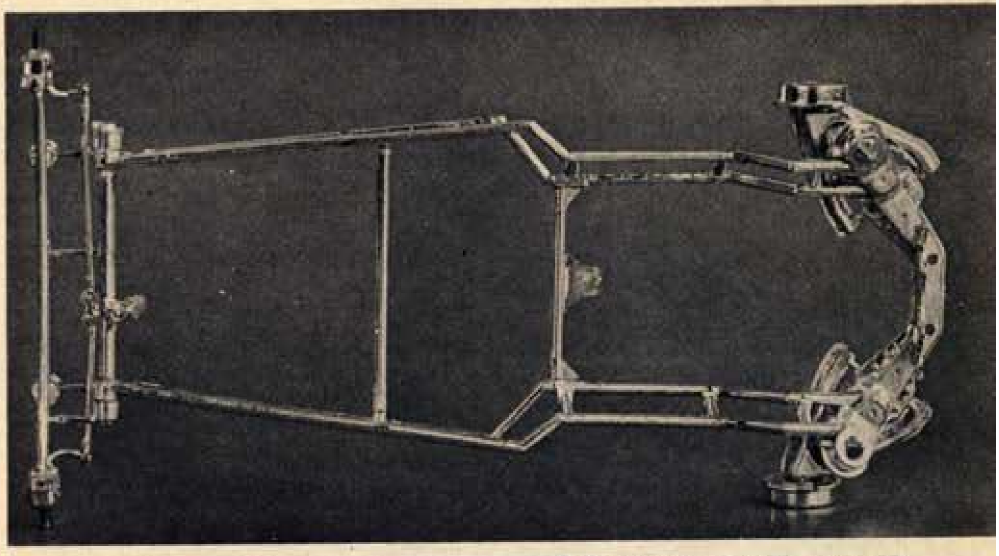
Step three and four are the front and rear axle assemblies. The front assembly contains many small locators, dictated by the desire to maintain a scale appearance which adds so much to any model. Take the time to adequately clean the plating from the small holes in the axle to assure a good bond to the suspension arms. Properly done, they will provide more than enough strength to support the model, but due to their small size, give them sufficient time to set before handling. The main thing to watch on assembling the rear suspension "A" frames is the angle assumed by the spring in relation to the frame



D. Small parts such as spindles and tie rod on this front axle assembly require care in installation.



E. Locators on torsion bar arms are almost non-existent in an effort to keep parts in scale. Caution must be used in removing chrome on arms as well as in holes in axle assembly.



F. Completed frame assembly has transverse torsion bars at front and stock Corvair sub frame with "A" arms at rear.

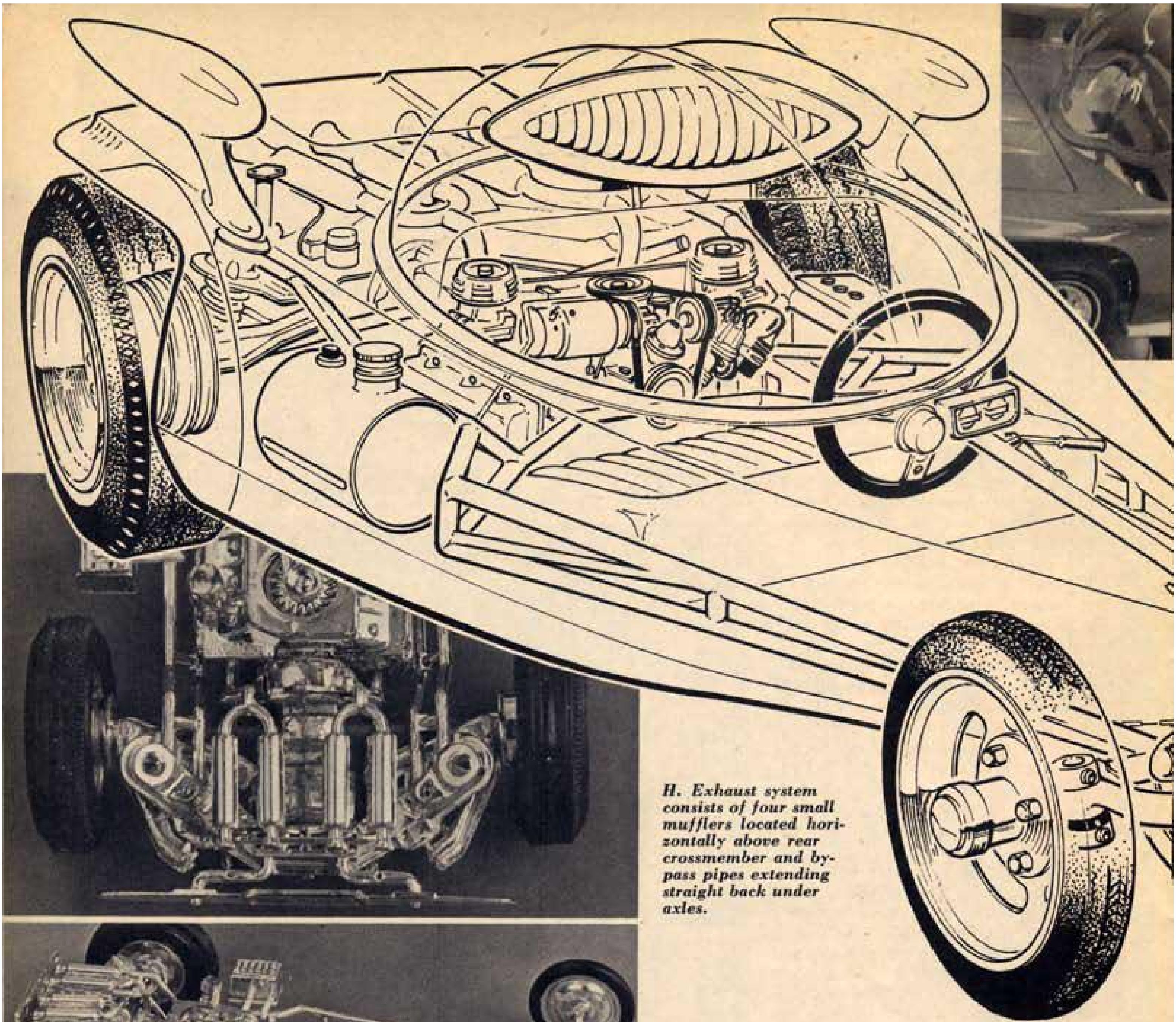


G. Frame follows same general shape as the body. Would make an ideal base for a wild all-out custom.

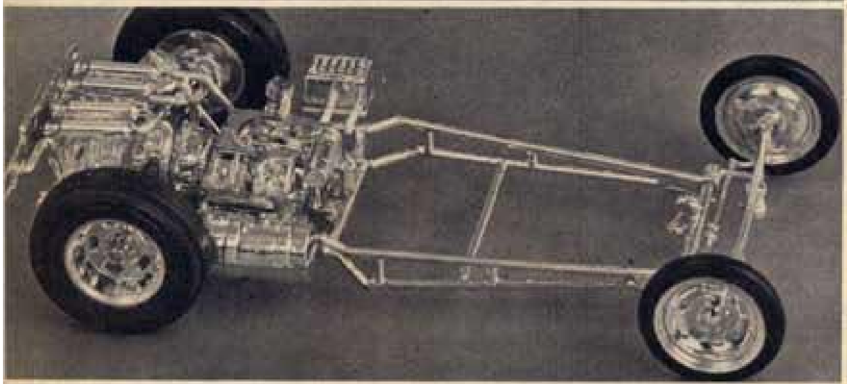
and "A" arm. If spring is glued to arm, do not wait too long before assembling unit to rear cross member. This will allow spring to change position slightly if required to align with cup in cross member.

Chassis final assembly is the next step and includes installation of wheels, tires, and engine, along with other details. The wheels are much easier to assemble by themselves and then slip on tires after they have set. Use a small file to flatten the face of the attach flanges between exhaust headers and tail pipes to obtain a better surface for cementing. There is a slight angle on them due to molding and alignment will be much easier with the two surfaces flat. The installation of the front wheels will call for a little caution, don't push too hard without backing up the spindle with one hand to prevent breaking the axle. The rear wheels are somewhat easier to install due to the metal axle. With the installation of the gas tank to the right frame tubes and battery on the left, the chassis is complete and only two unplated parts have been used so far.

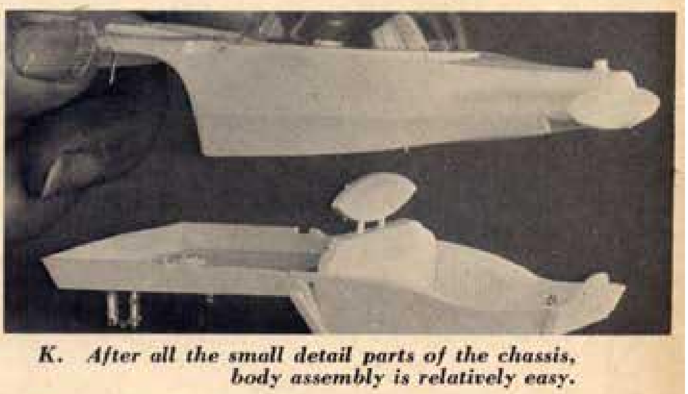
The final assembly of the body section will be easy after working with the



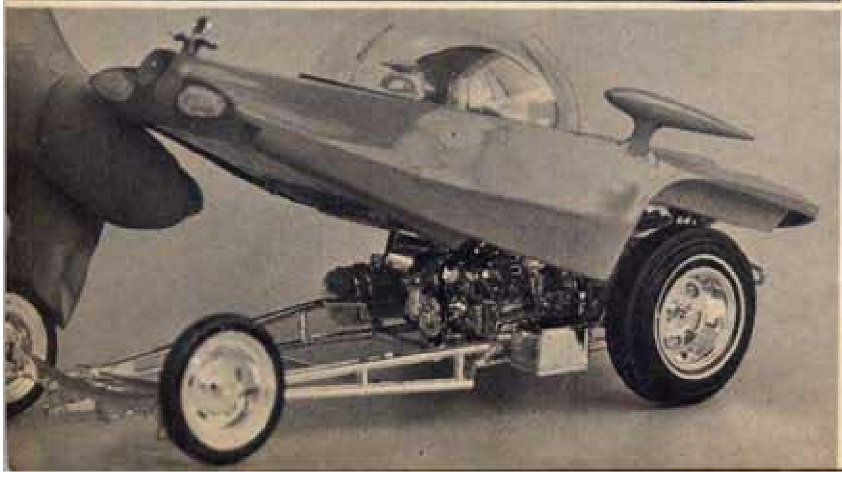
H. Exhaust system consists of four small mufflers located horizontally above rear crossmember and by-pass pipes extending straight back under axles.



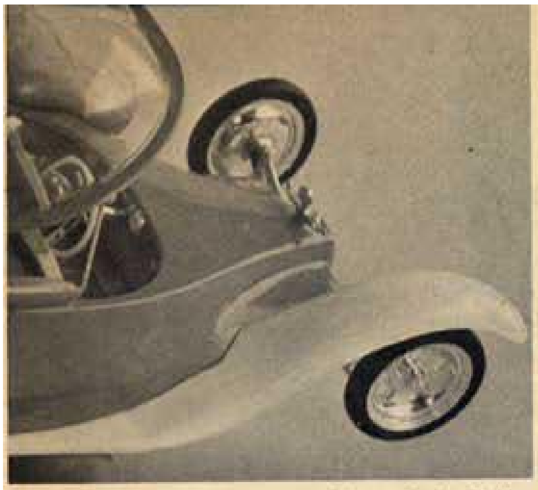
J. Painting some of the minor details of the chassis and engine would improve on the all-chrome look. Such things as the fan belt, battery and distributor will add some contrast. Those Astro wheels sure add a finishing touch.



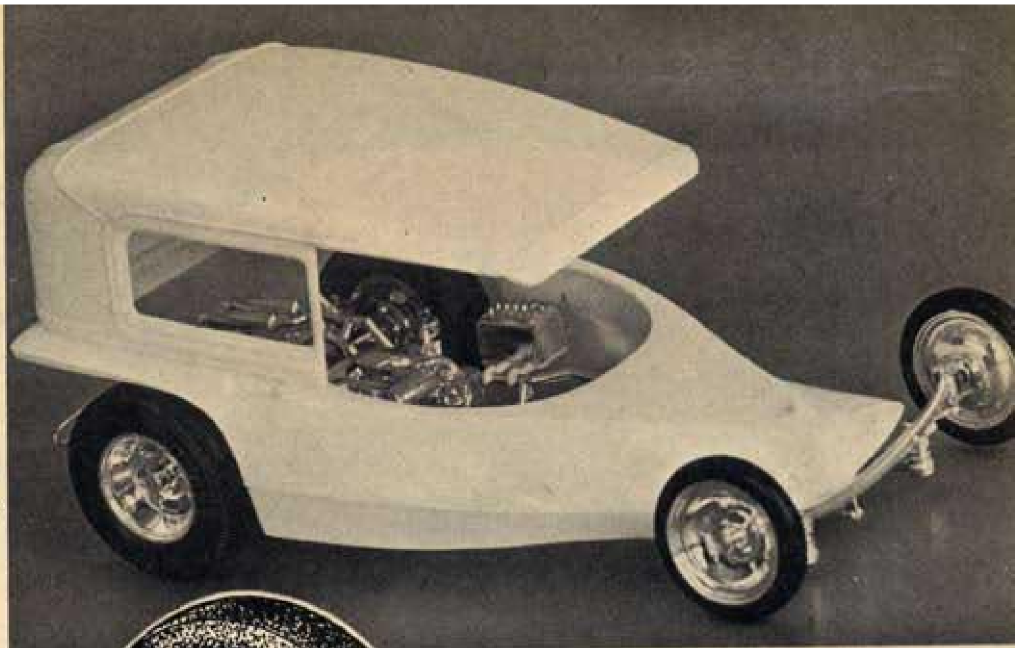
K. After all the small detail parts of the chassis, body assembly is relatively easy.



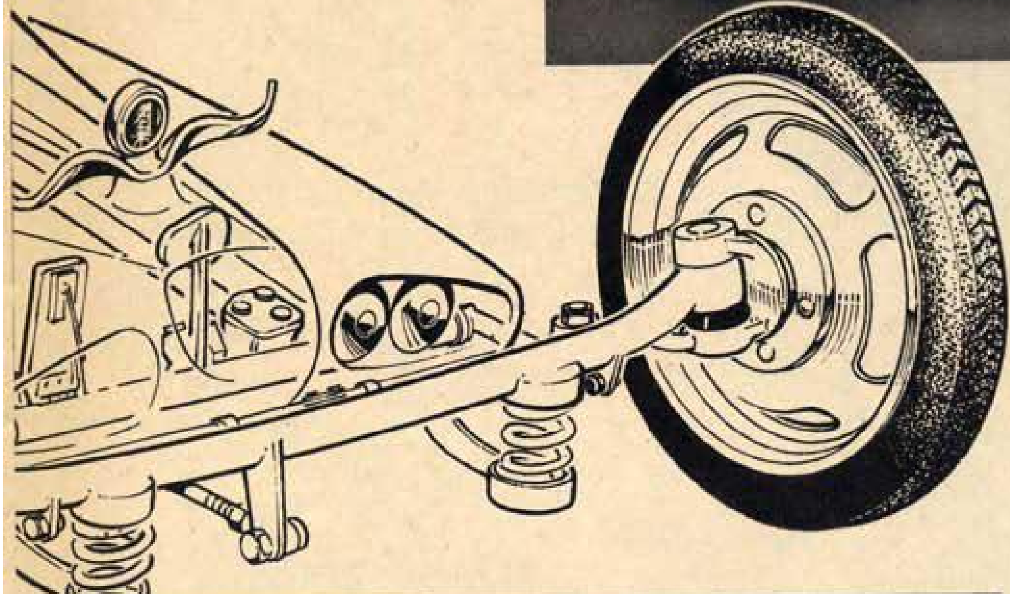
L. Final step is mounting the body to the chassis. It's a shame to cover up all that chrome, but you can always turn it upside down for another look.



M. Want to add something original? Try a set of front fenders from the Revell '31 Ford kit for that custom look.



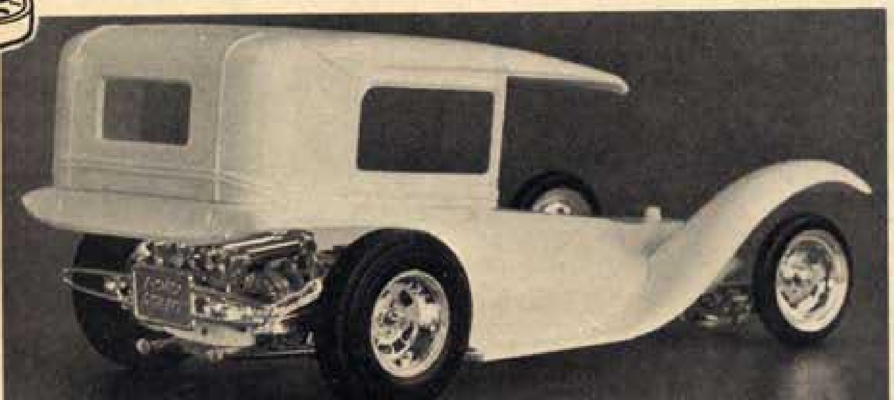
N. Here is a way of using that excess two-door body from the Revell '31 Woodie Wagon. A good way to use those excess parts.



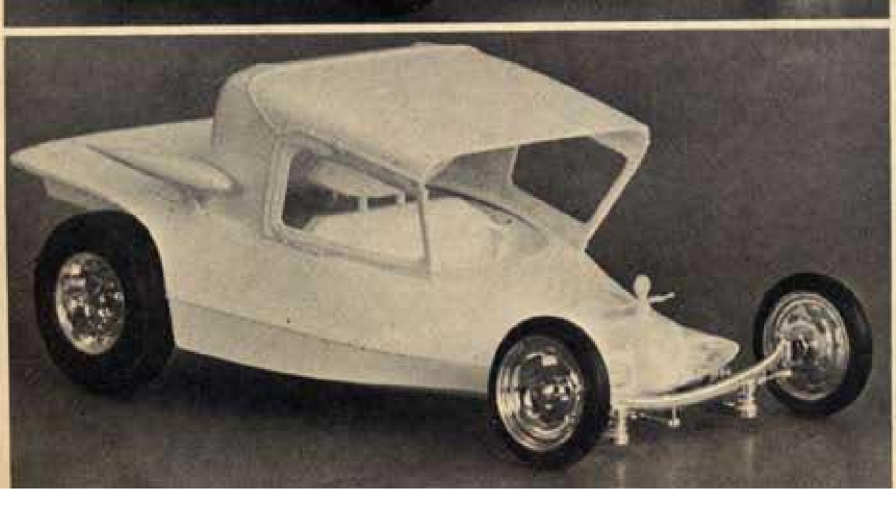
delicate parts encountered in the chassis. The main points to watch are in cementing the hinge and lift arm retainers. An excess of glue on these may prevent proper operation of the moveable sections. All paint detailing should be accomplished before assembly, and to make your model more authentic, keep the seat and side panels of the interior a rich shade of pink pearl. The exterior color is much darker, almost into the red shades. The tank fins may be installed to the body before painting, eliminating the chance of glue spoiling your paint job. Do not paint the area behind the headlights the body color, leave natural or paint this area silver. Pink in this area would spoil the effect of the lights.

To keep the shine off the "Big Daddy's" pants, use flat black for his suit and add a touch of gloss black to the lapels of his coat and the side stripe on his trousers. After all, we want him to look his best. As for his little buddy "Rat Fink," color him small.

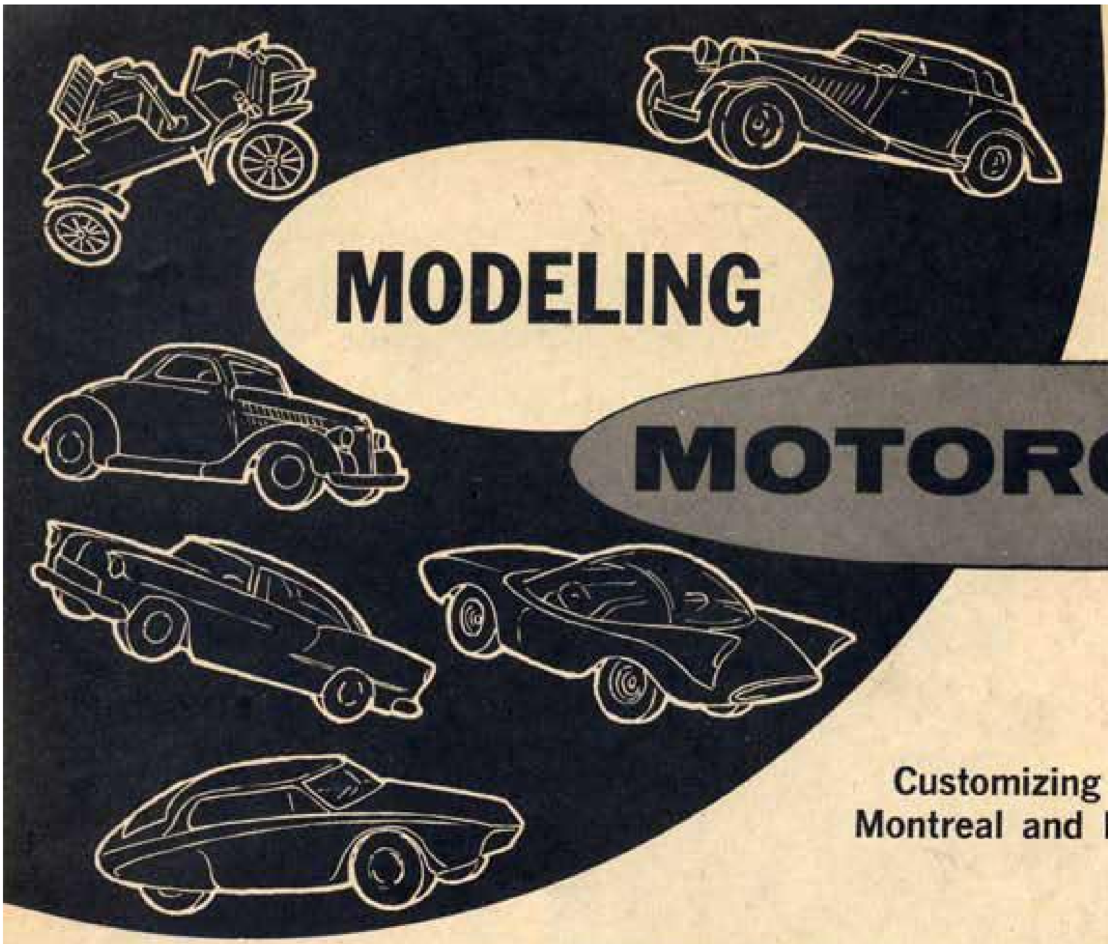
There you have it, the modern version of the Road Agent. Somewhat of a change from Grandpa's day, but time marches on and so does the active "Big Daddy" who even now may be shaping around the plaster and fibreglass creating the next in line of his far out customs.



O. If you're with us so far and like the idea, why not add the front fenders and you have changed the car's identity completely. Add a few details of your own and "Big Daddy" will never recognize it.



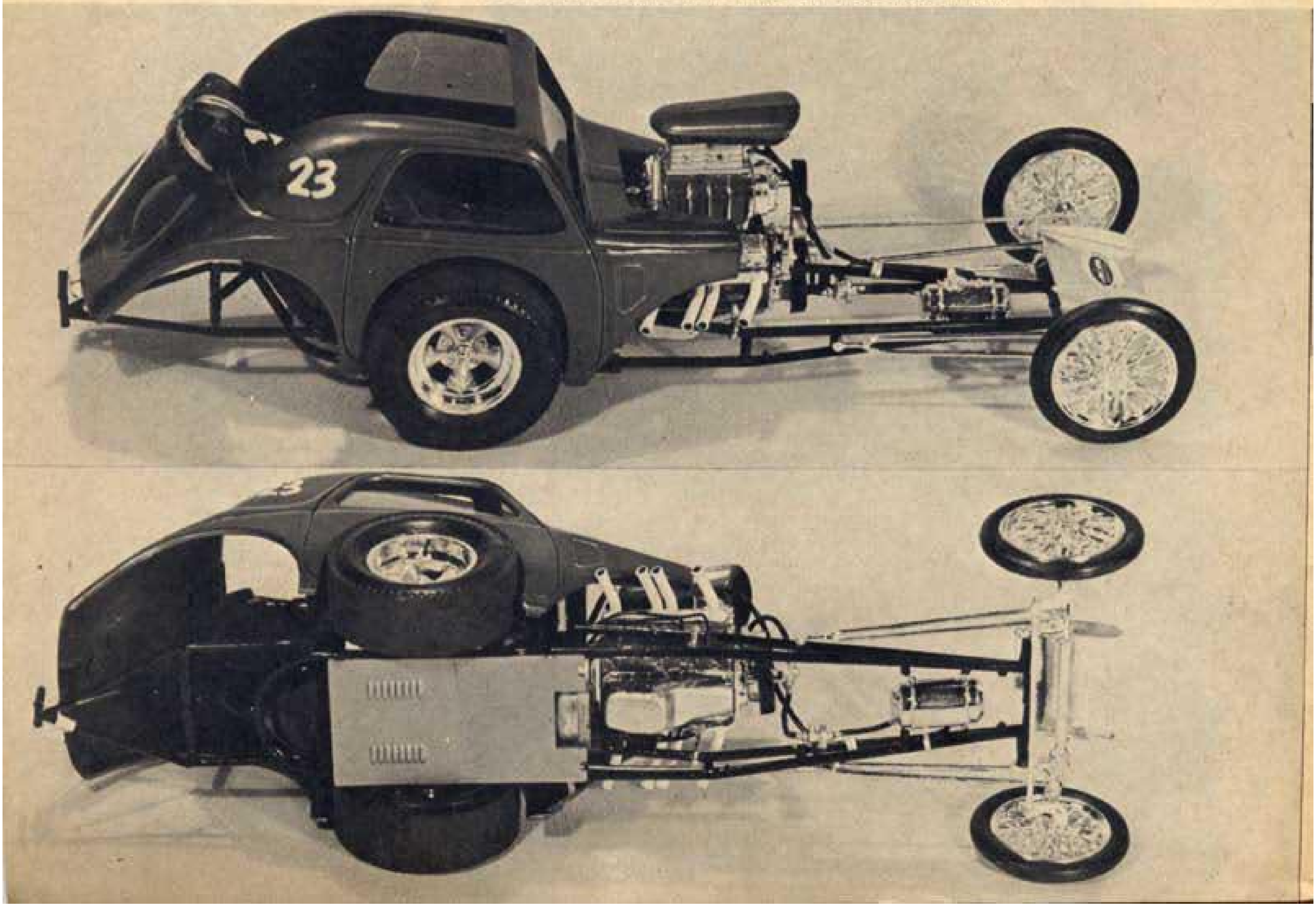
P. Perhaps you would rather have a coupe. It's still the two door Ford body, just cut off the front section and do a little reshaping to the window frames. Well, at least it is different!

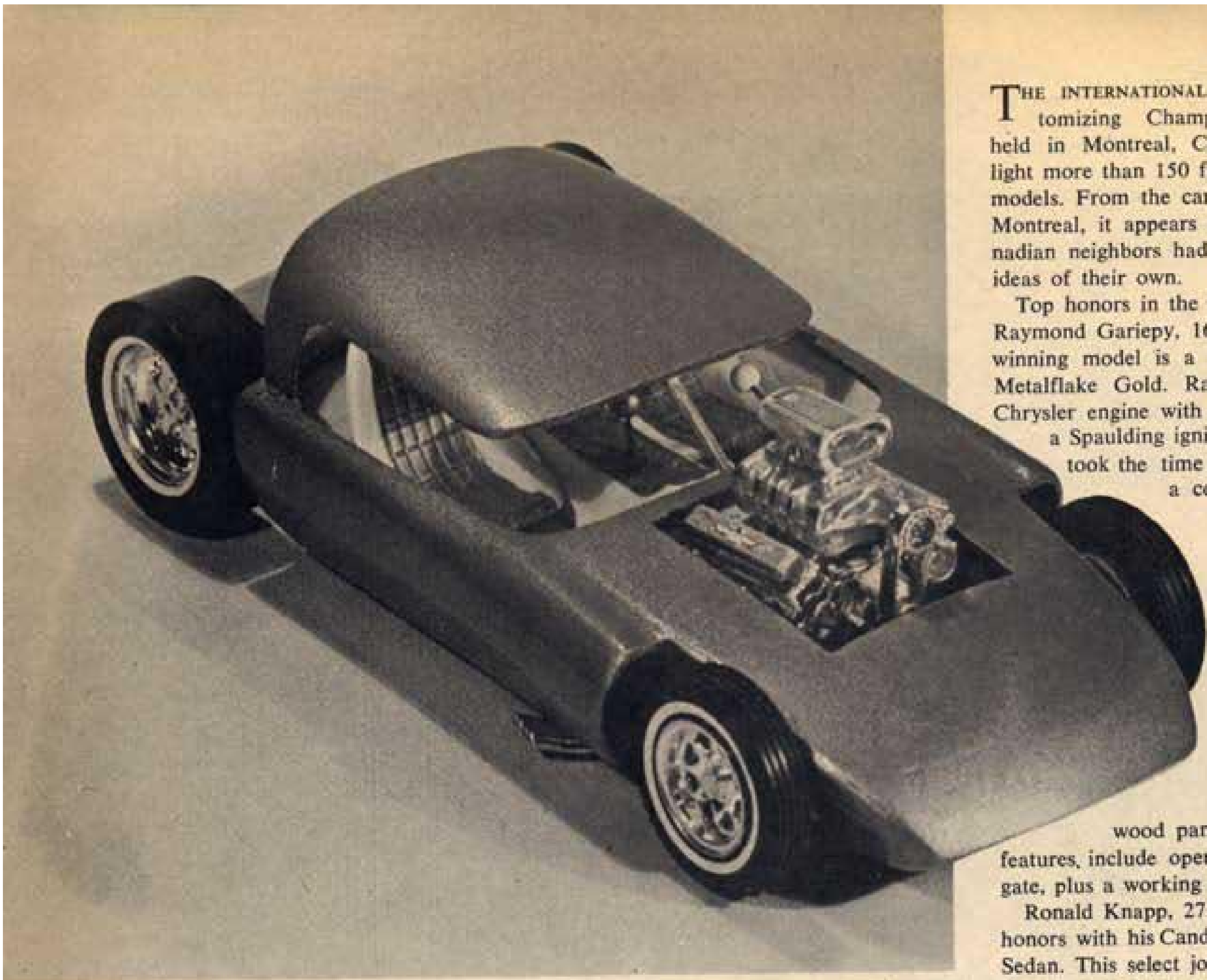


MODELING MOTORCADE

Customizing Champs from Montreal and New York Shows

COMPETITION HONORS WENT TO RONALD KNAPP OF MONTREAL FOR THIS CORVETTE-POWERED FIAT DRAGSTER. NOTE FUEL LINES.





THE INTERNATIONAL MODEL CAR Customizing Championships recently held in Montreal, Canada, brought to light more than 150 fantastic custom car models. From the car models viewed in Montreal, it appears as though our Canadian neighbors had a few custom car ideas of their own.

Top honors in the Mild Class went to Raymond Gariepy, 16, of Montreal. His winning model is a 1930 Ford painted Metalflake Gold. Raymond installed a Chrysler engine with a 6-71 blower and a Spaulding ignition. Raymond also took the time and trouble to do a complete hand-made wood paneling job. Working features, include opening doors and tailgate, plus a working steering mechanism.

A '57 T-Bird? That's what G. Vachan of Montreal says it was to start!

Ronald Knapp, 27, took Radical Class honors with his Candy Purple 1940 Ford Sedan. This select job was chopped, sectioned, and channelled. Ronald installed a Revell Custom Car Parts Chrysler engine, an interior that was completely upholstered, while working features included opening doors and trunk. And, if this wasn't enough, Ronald went on to take top prize in the Competition Class with a Fiat Dragster model painted Candy Blue. Ronald had a Revell Custom Car Parts Corvette engine with many parts adapted from the Tony Nancy '22 Jr. kit. All of the fuel lines and wiring were put into this exciting model, along with throttle linkage. Other details were that the inner wheel covers were made from card stock and mag wheels and spokes painted flat aluminum.



YUON ST. MARSEILLE OF LAVAL-DES-RAPIDES, QUEBEC, ENTERED A RED METALFLAKE EL CAMINO, BUILT FROM AN AMT KIT.

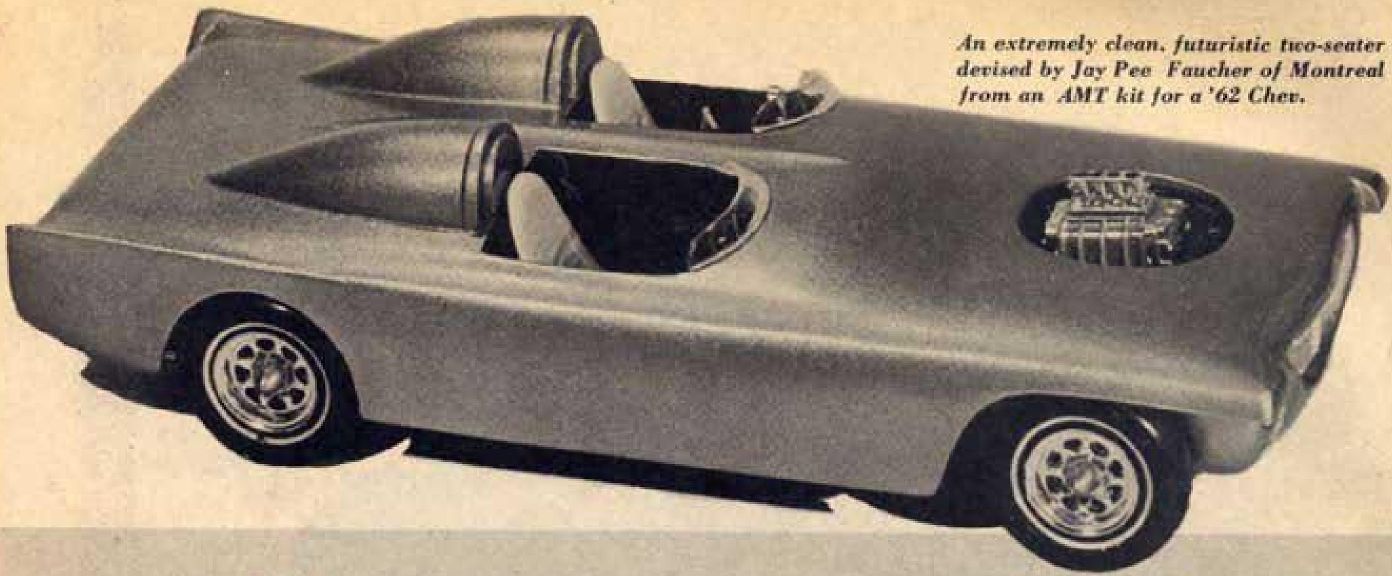
Top prize in the Paint Class went to Mike Gariepy, older brother of Raymond Gariepy, the Mild Class winner. Mike put a Candy Green paint job on a '32 Ford. Mike took special efforts in detailing his car. He has a T-Bird engine with two four-barrel carbs and a Corvette air filter. General details included a molded rear deck, and a custom interior – down to the key in the ignition. The trunk actually opens.

Each of these car modelers now have the opportunity to compete in the International Championships to be held in Washington, D.C. early in April and perhaps they might be the winner of the 1964 Corsa.

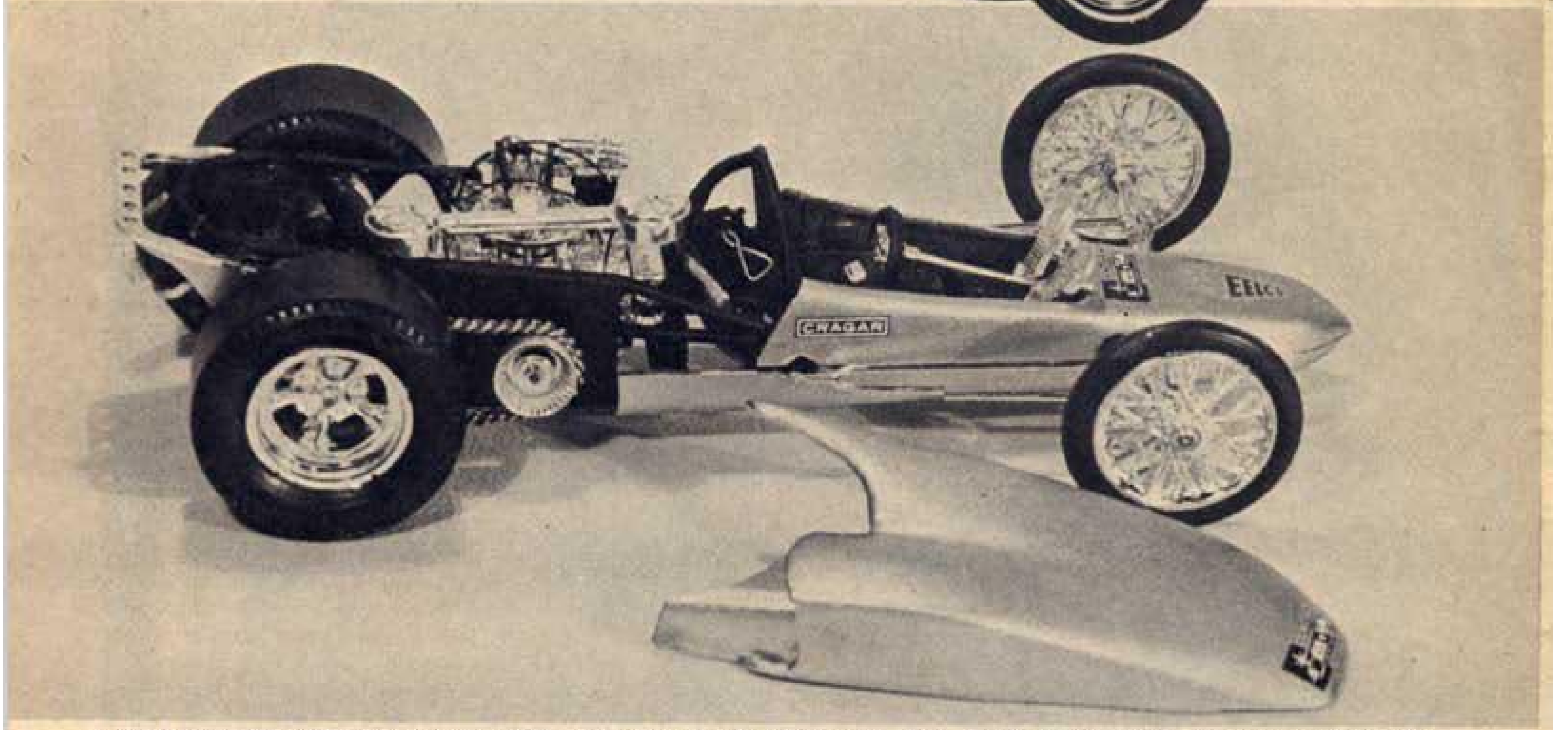


BOLD RESTYLING OF A '63 MERCURY CONVERTIBLE WON RECOGNITION FOR THOMAS BAILLIE OF MONTREAL. ENGINE IS BLOWN.

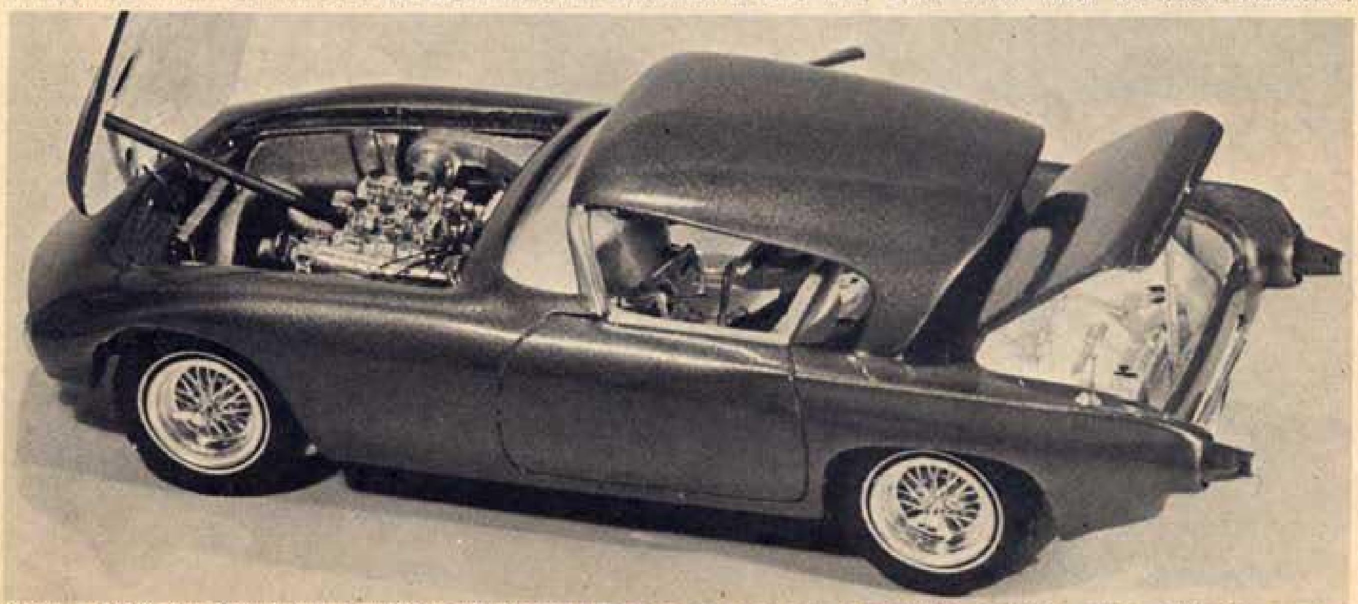
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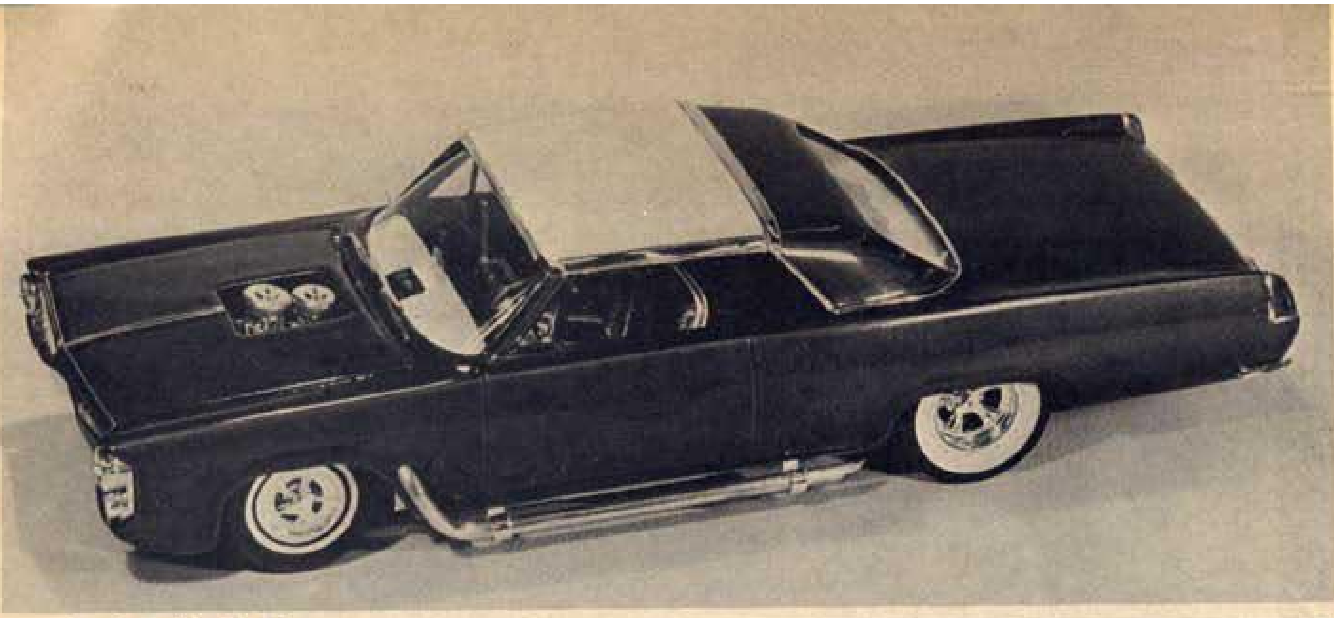
An extremely clean, futuristic two-seater was devised by Jay Pee Faucher of Montreal from an AMT kit for a '62 Chev.



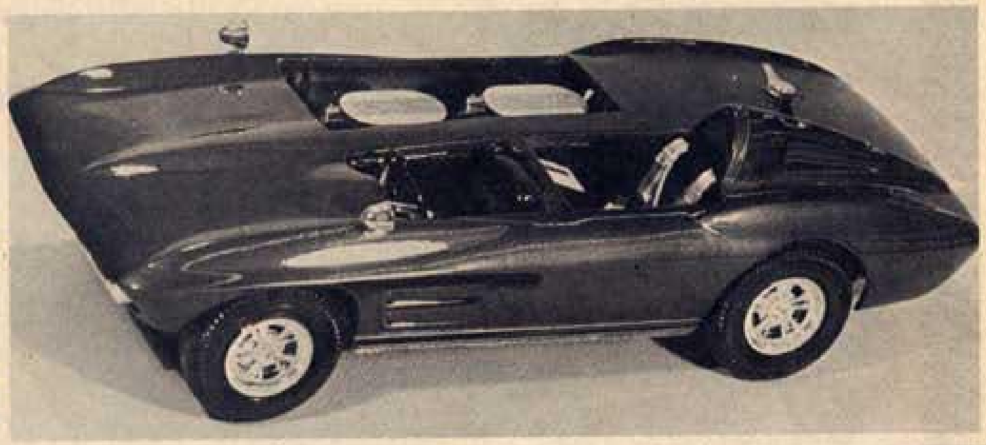
A REAR-MOUNTED CORVAIR ENGINE OPERATING VIA CHAIN DRIVE SETS THIS ENTRY APART FROM THE USUAL DRAGSTER.



BRIAN J. PERKS OF LONGUEUIL, QUEBEC, TURNED AN AMT '57 T-BIRD INTO THIS STRIKING CUSTOM. HOOD AND TRUNK OPEN.

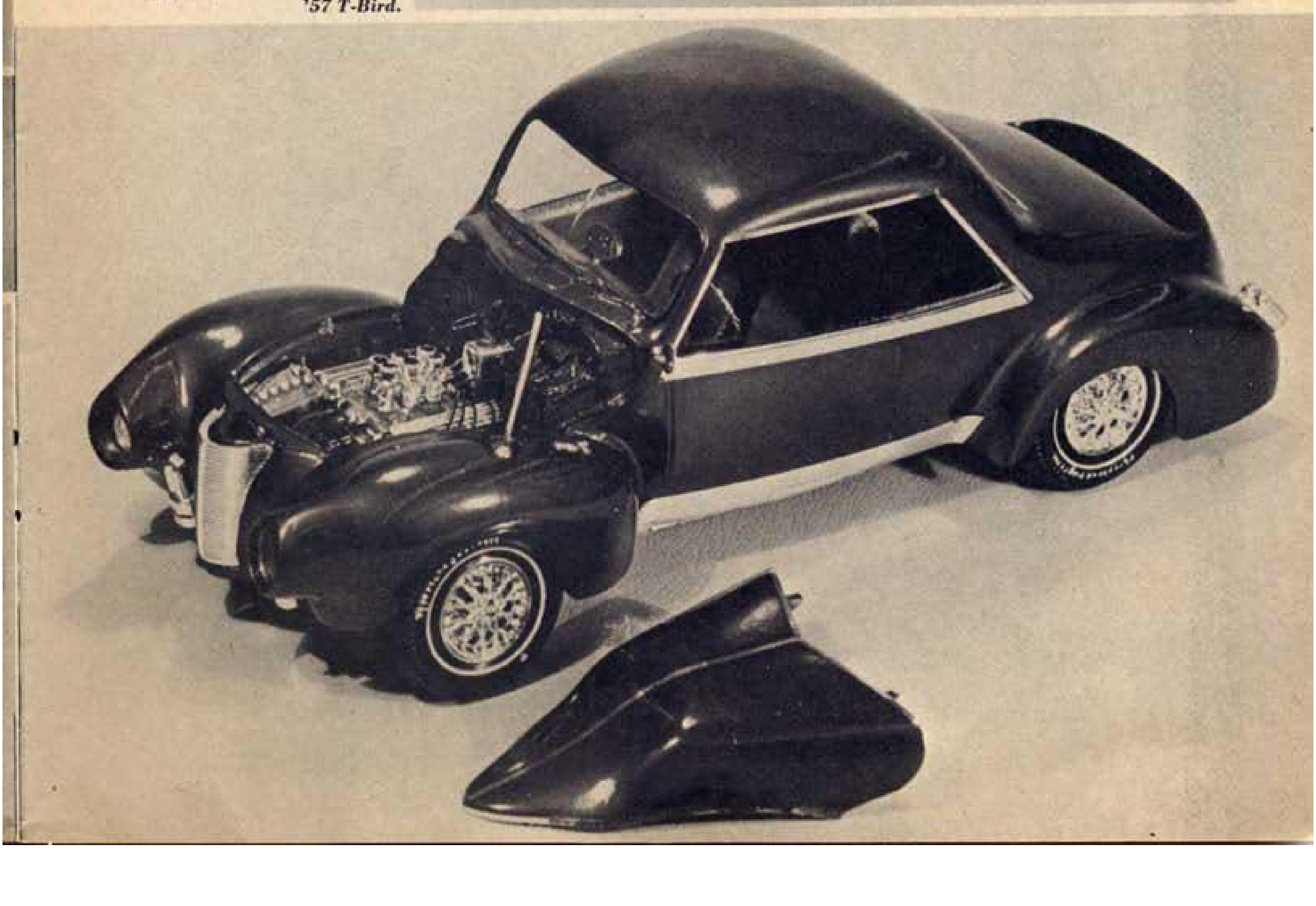


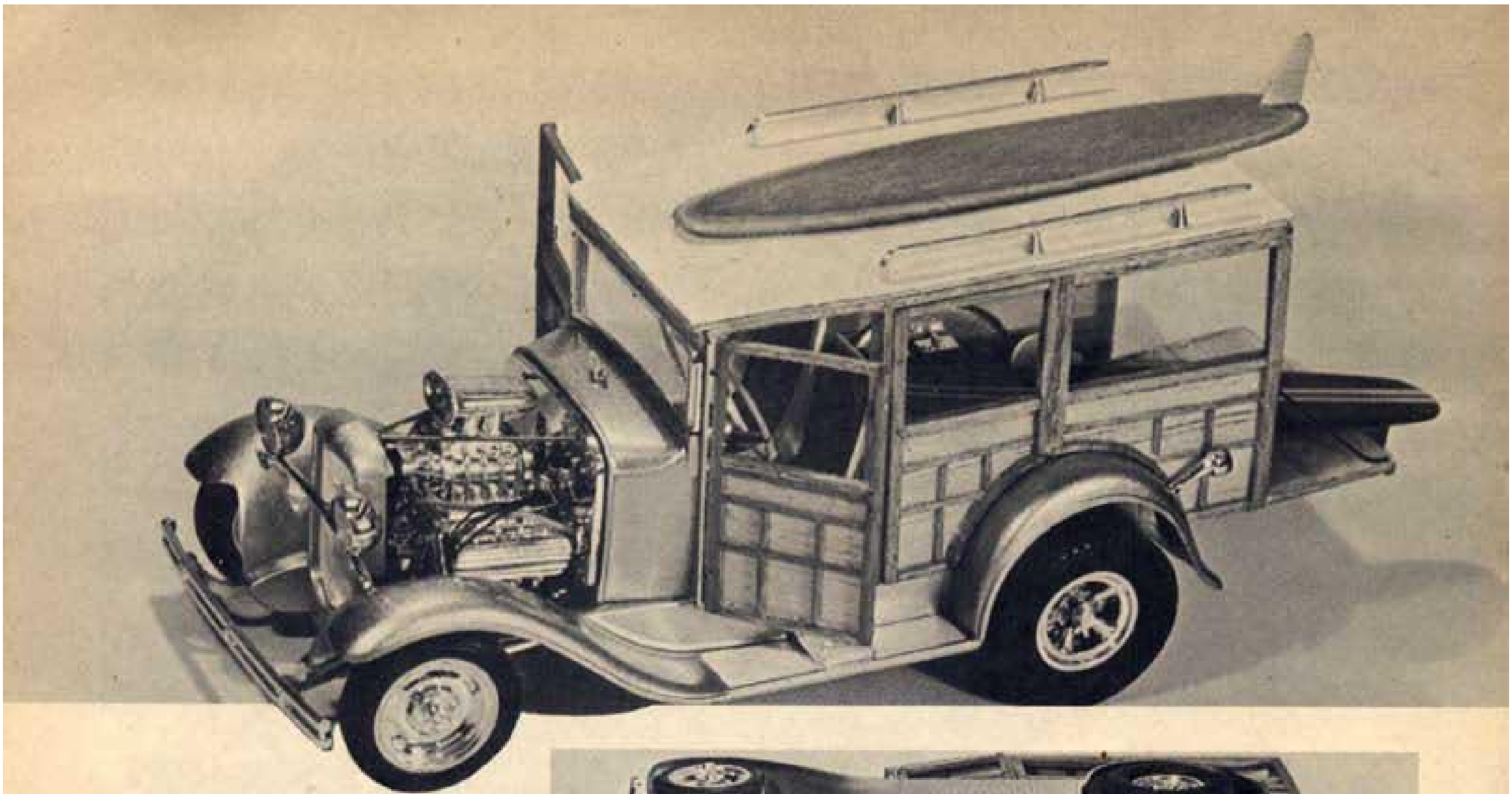
Another effort by Thomas Baillie, this '63 Pontiac features a 421 engine, candy red and gold color scheme.



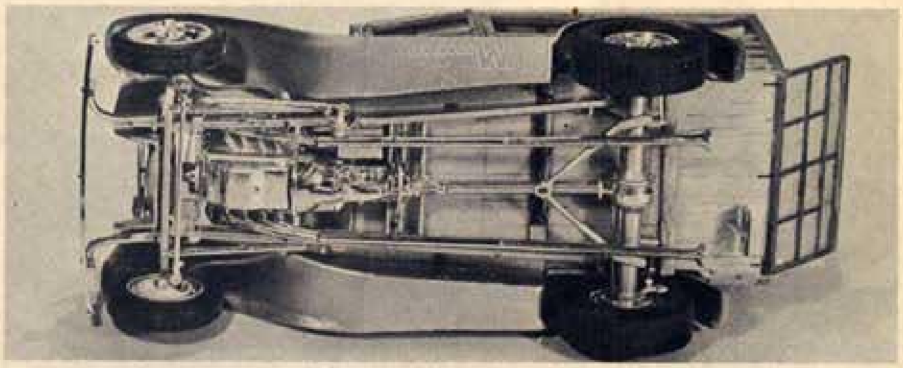
Jay Pee Faucher lent his dramatic touch to an AMT Corvette and installed two Ford 390 engines in tandem at right.

A '40 Ford was transformed into a bold loking dream car by Joseph Lapin of Montreal. Engine is '57 T-Bird.

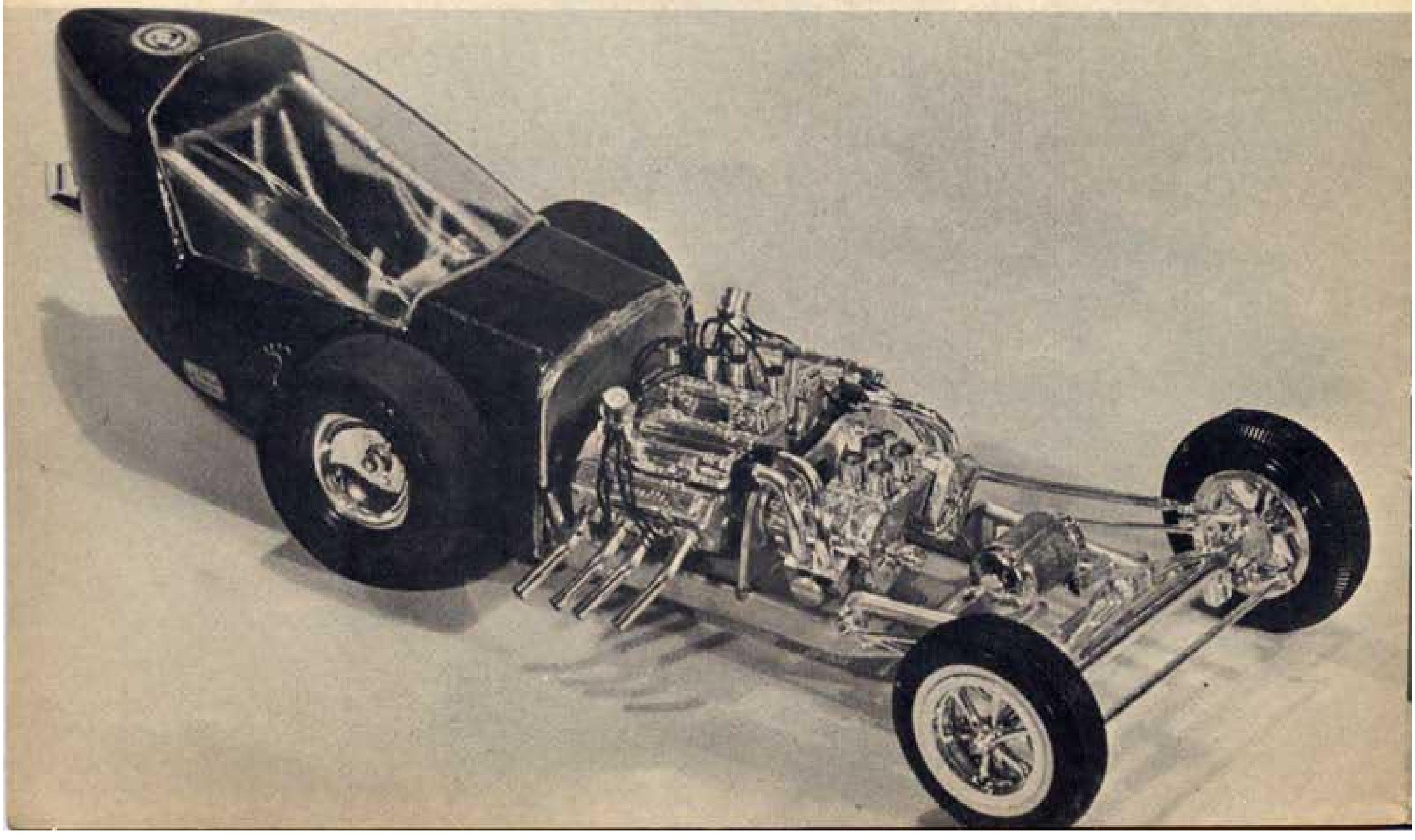


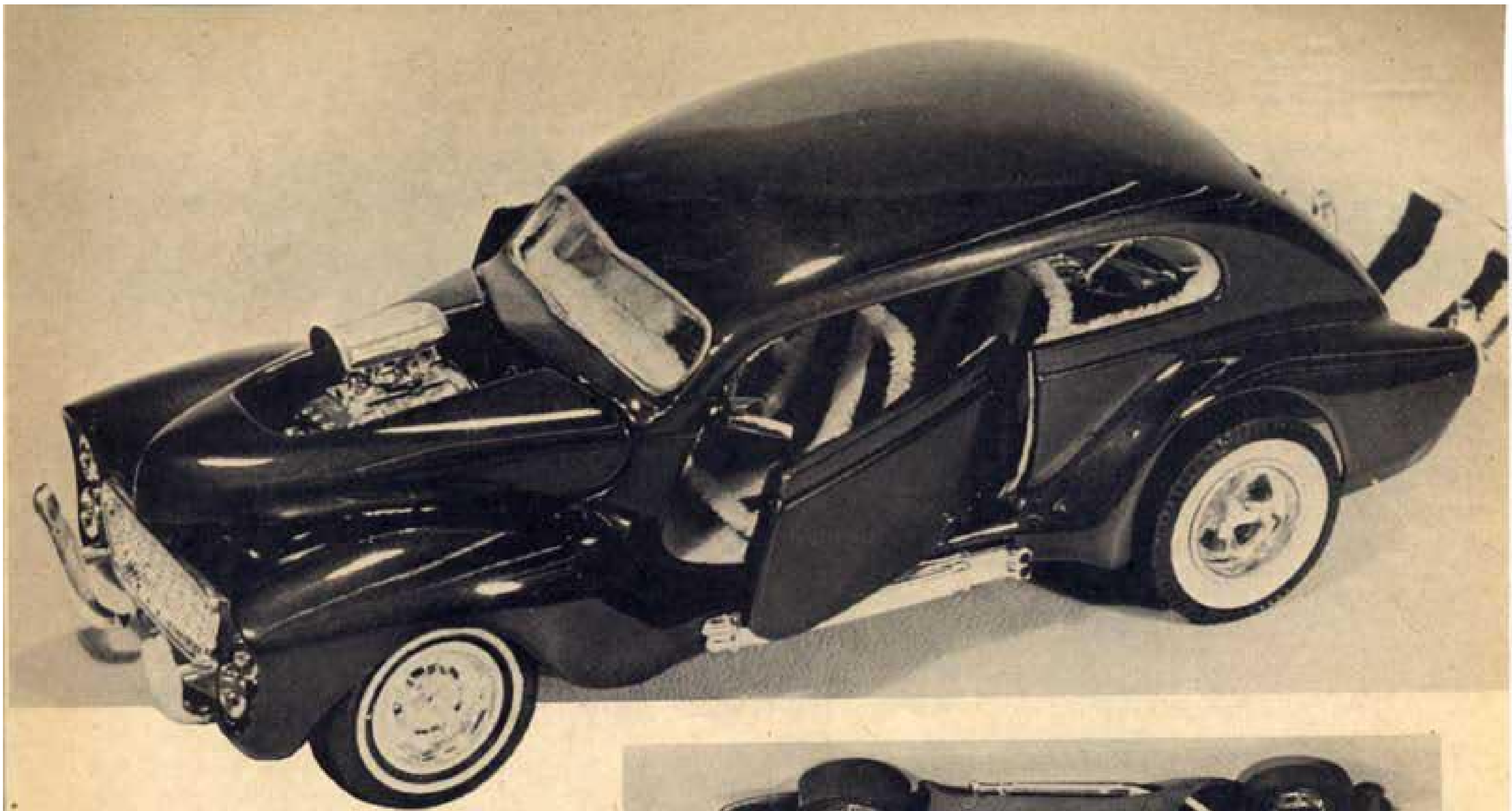


Mild Class Honors went to this slick "A" woody, built by Raymond Gariepy of Montreal. Wood paneling is hand-made.

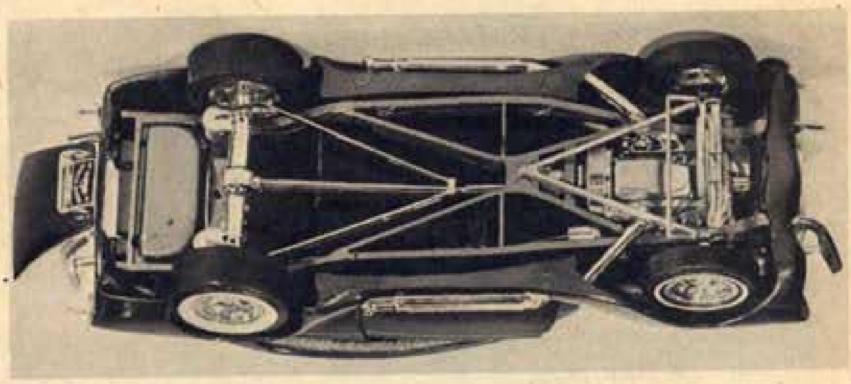


Steve Warren of Montreal placed two blown Corvette engines in his AMT dragster. Color is green metalflake.

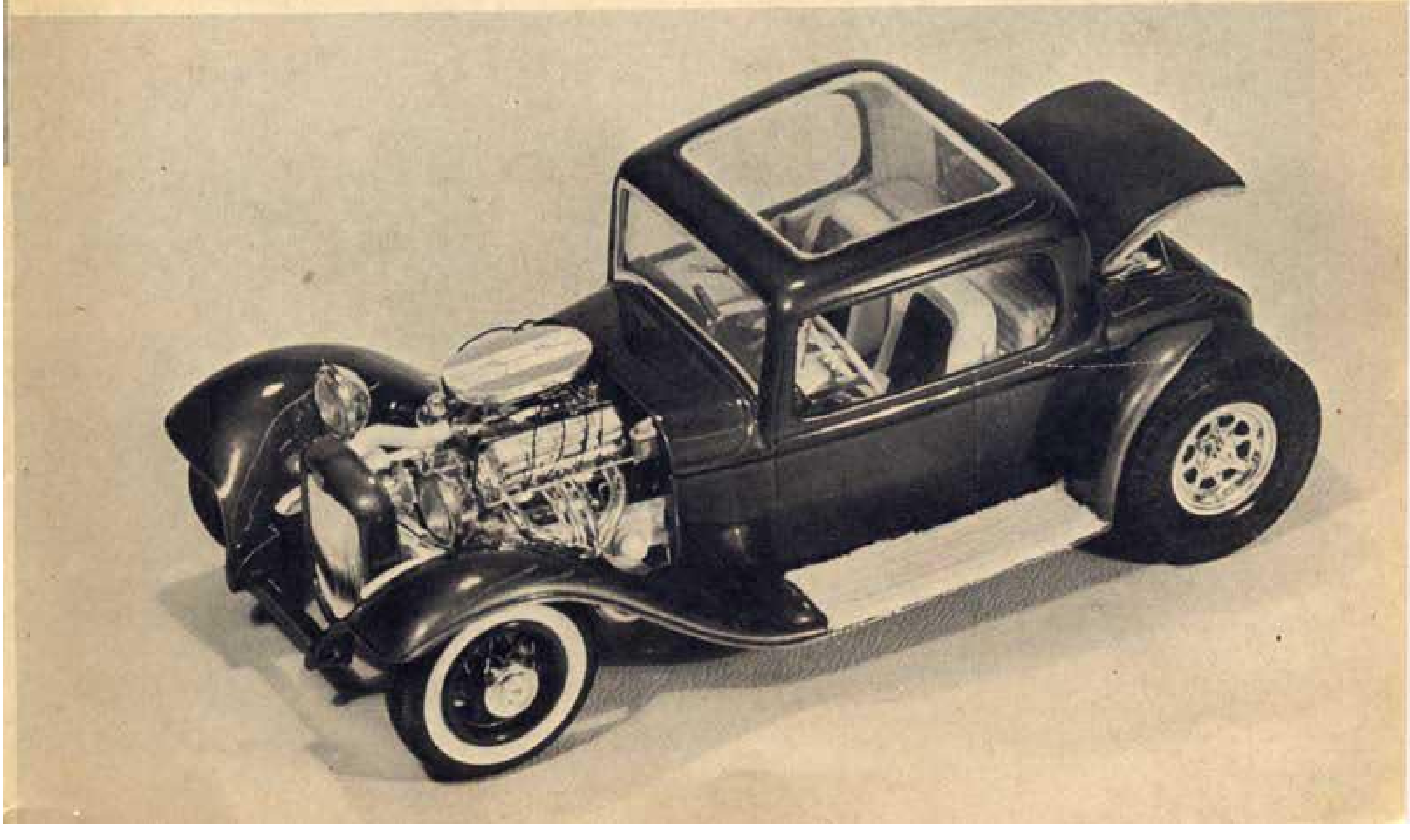




Ronald Knapp of Montreal walked off with the Radical Class trophy when he submitted this purple '40 Ford.



Candy green was Mike Gariepy's wise choice for this '32 Ford coupe. With it, he won the contest's Paint Class.



GREAT CUSTOMS ...and how to

LI'L SCREAMER II

It takes plenty of power to put the front wheels of a '34 Ford in the air ... This rod has what it takes and it isn't hard to copy!

By Robert Hoeppner

The little B/Altered Coupes are not generally considered as part of the spectacular group of cars that provide the dramatic wheelstands at the drags every weekend, but this little coupe can hold its own with any of the dragsters in being able to point its nose skyward. Besides providing these spectacular displays, it is also fast enough to capture its class win at this year's AHRA Summer Nationals. The car was built by owner-driver Jack Ditmar and Herb Moller and started life as a '33 Ford Three Window Coupe.

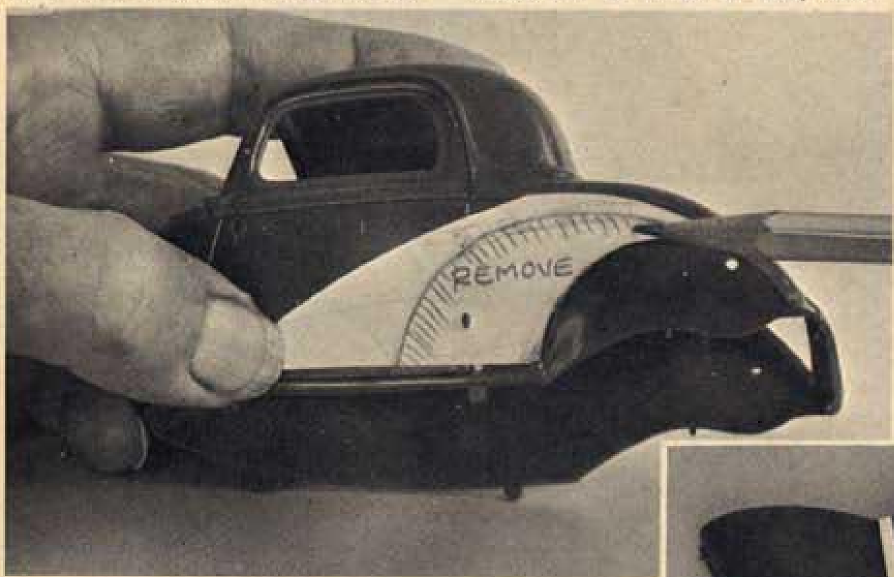
Our model will use the body section of Monogram's '35 coupe which will require some modifications to start with. A late model rear end will be required such as the Revell '55 or '57 Chevrolet or Willys kit contains. Install a set of AMT wide-base dish type mags and Revell M & H slicks. The rear end assembly will be required, to know how far in to set the back panel of the body wheel wells and still have clearance with the tire sidewalls.

The body has been set back 20 inches on the frame, in our scale, this is just over 13/16th of an inch. Measure forward this amount on the lower edge of the body and from this point, swing an arc that will intersect the old wheel well at approximately the intersection of the trim beads. When one is established that looks like the pictures, make a template and transfer to other side of body. Then remove the necessary material as well as the roof insert and firewall. Wheel wells can now be fabricated and installed, use card stock or sheet plastic, be sure they will fit between the rear slicks.

The American Racing dragster spoke wheels can be found in many AMT kits. Use these on a front axle assembly from the Revell Roadster custom parts kit #C-1132 to complete the chassis. A spacer block is used between the spring and cross member to raise the front end. The original front cross member is removed and a new one installed just forward of the side rail ends.

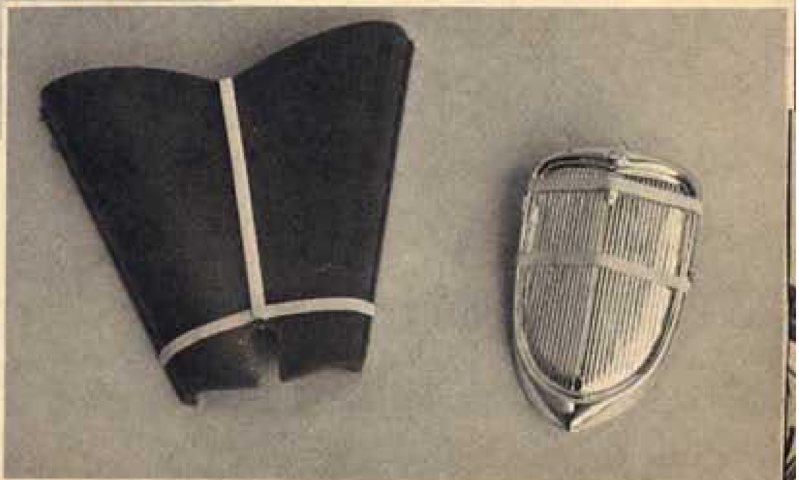
The engine, a Revell custom parts kit Chevrolet, is mounted on a tubular cross member above the frame rails. Exhaust headers from the Orange Crate will fit just right, dropping below the frame and out to the side. Install the Moon fuel tank from the roadster speed equipment kit on a stand just forward of the engine.

Due to the set back of the body and the extended front suspension, the hood will have to be extended somewhat. This will require reworking the top, both side panels and the grille. Start by removing



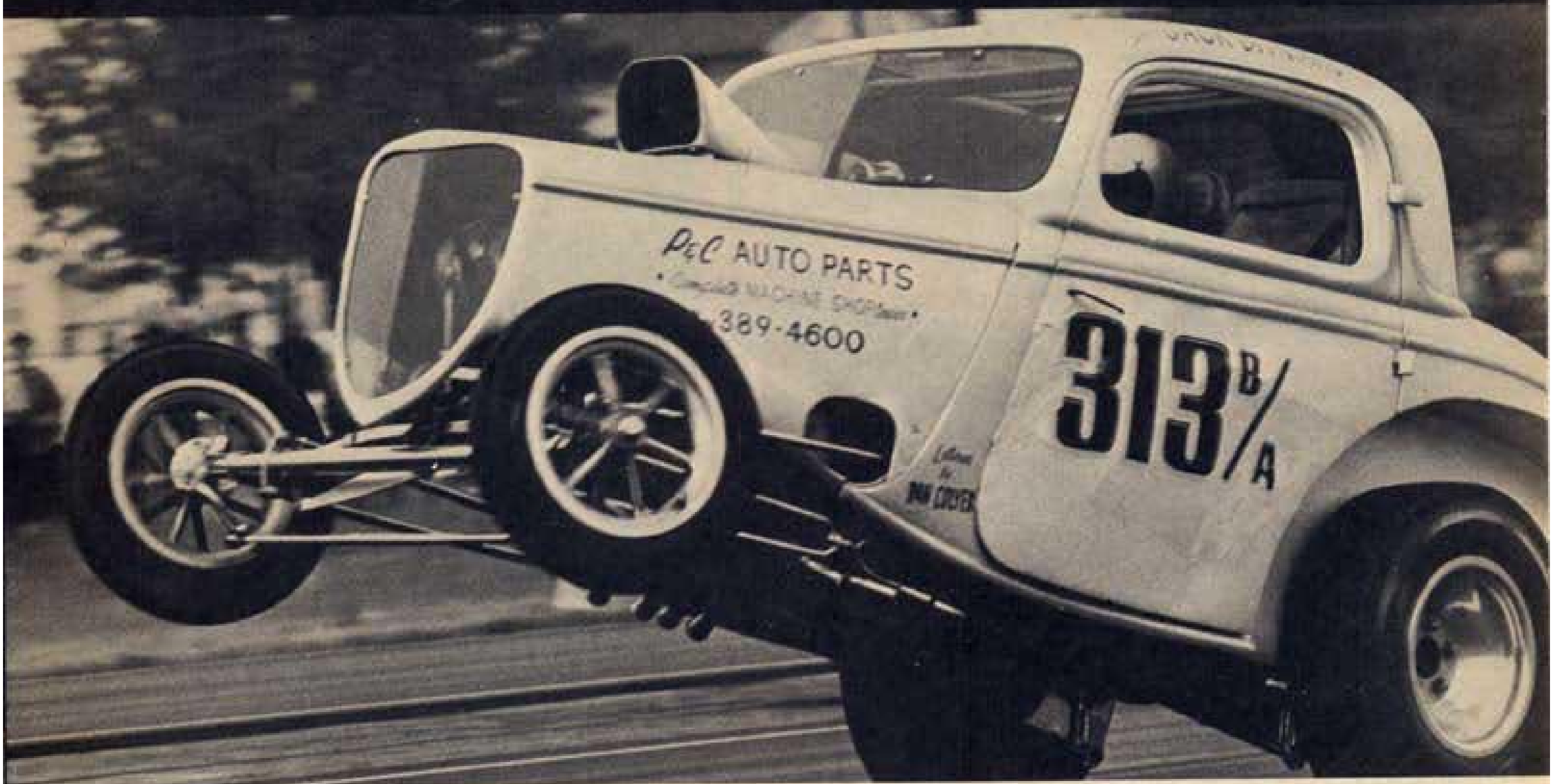
Make a template of reworked wheel well area. Curve should blend into existing recess at intersection of trim beads. Transfer line from paper pattern to both sides of the body to make sure material removed is equal on both sides.





Hood and grille cuts described in text are indicated in this photo. Refer to line drawing showing areas that will require filling.

AND HOT RODS build the models



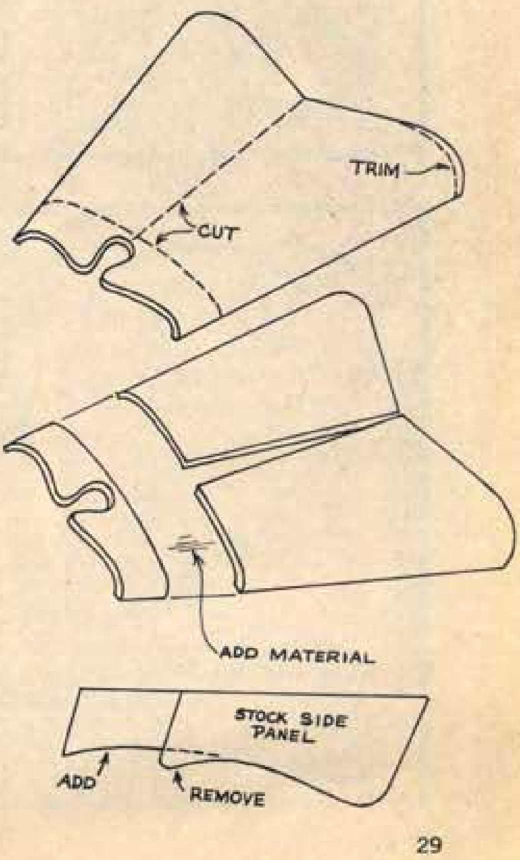
approximately a 3/8 inch section of the grille horizontally just below the top radius, and while you are at it, remove the entire center section leaving only the frame. Then glue the two sections together. The top of the hood will require cutting into three parts, first straight across, just behind the hole on top. Then cut lengthwise at the center line, glue the small forward section to the grille. Add approximately one inch of material to each side panel. Determine proper location of shell, trim side panels as required and when proper relationship is accomplished, glue side panels to shell. Now hood top sections can be trimmed on aft end to match cowl and hood side panels. After fitting to these two edges, there will be a long thin triangular gap between them. This, as well as the amount that side panels were extended, can be filled with scrap plastic from the basic body kit.

The original car has the entire hood section pivoting from a hinge at the bottom center and it can be displayed to a better advantage.

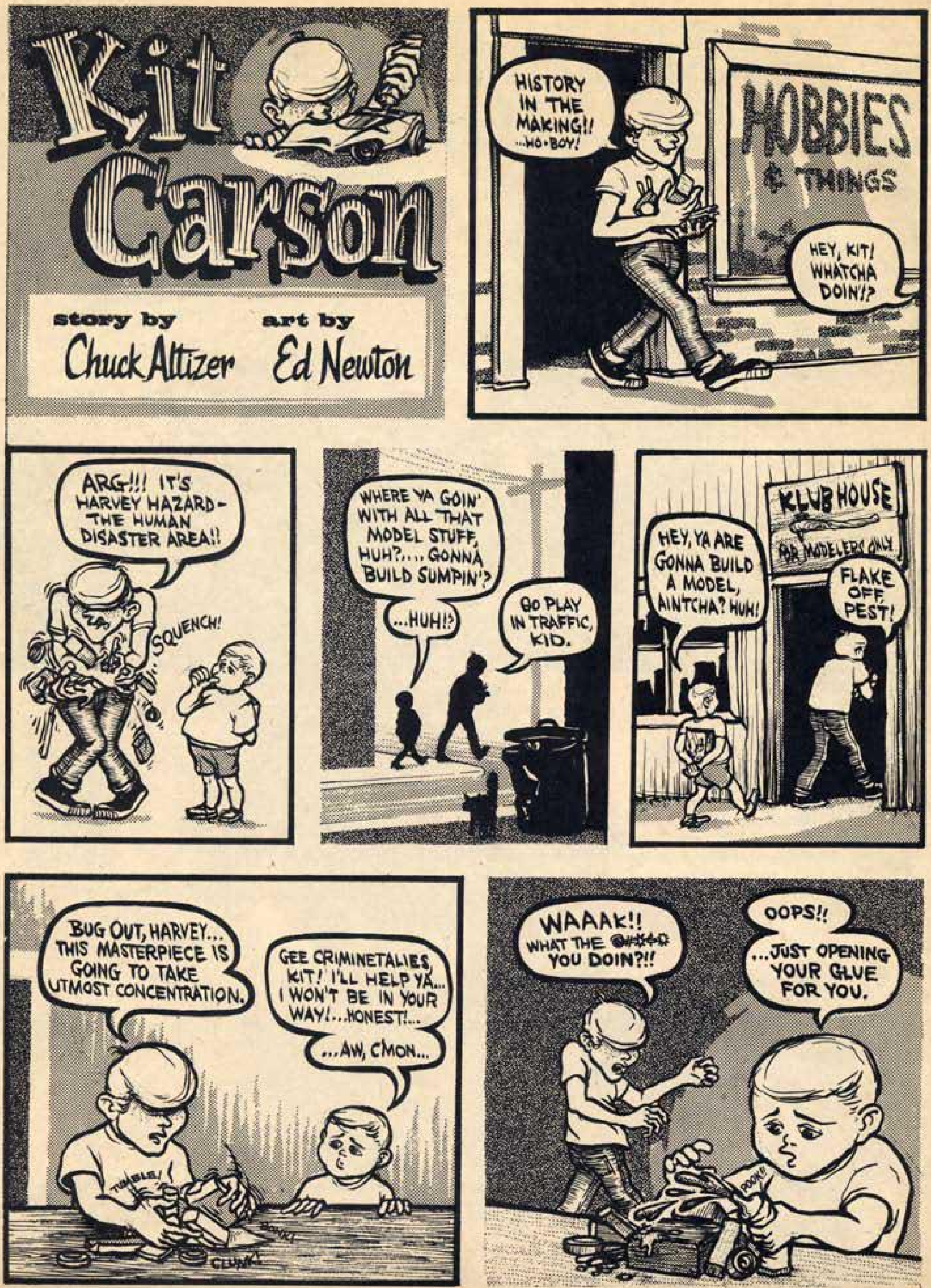
The actual car is painted a basic mother of pearl with all trim in candy blue, this should look swell on your model.

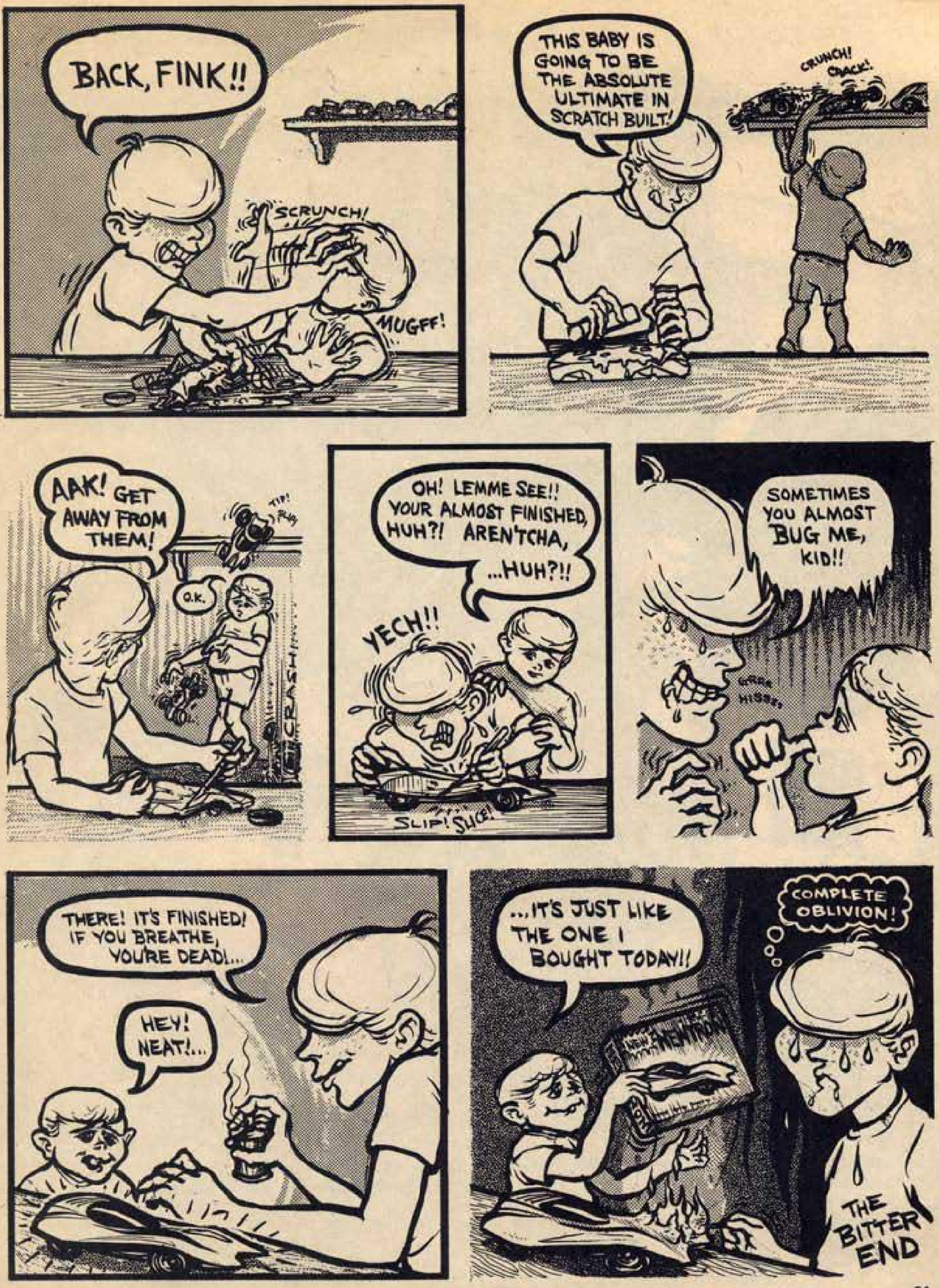


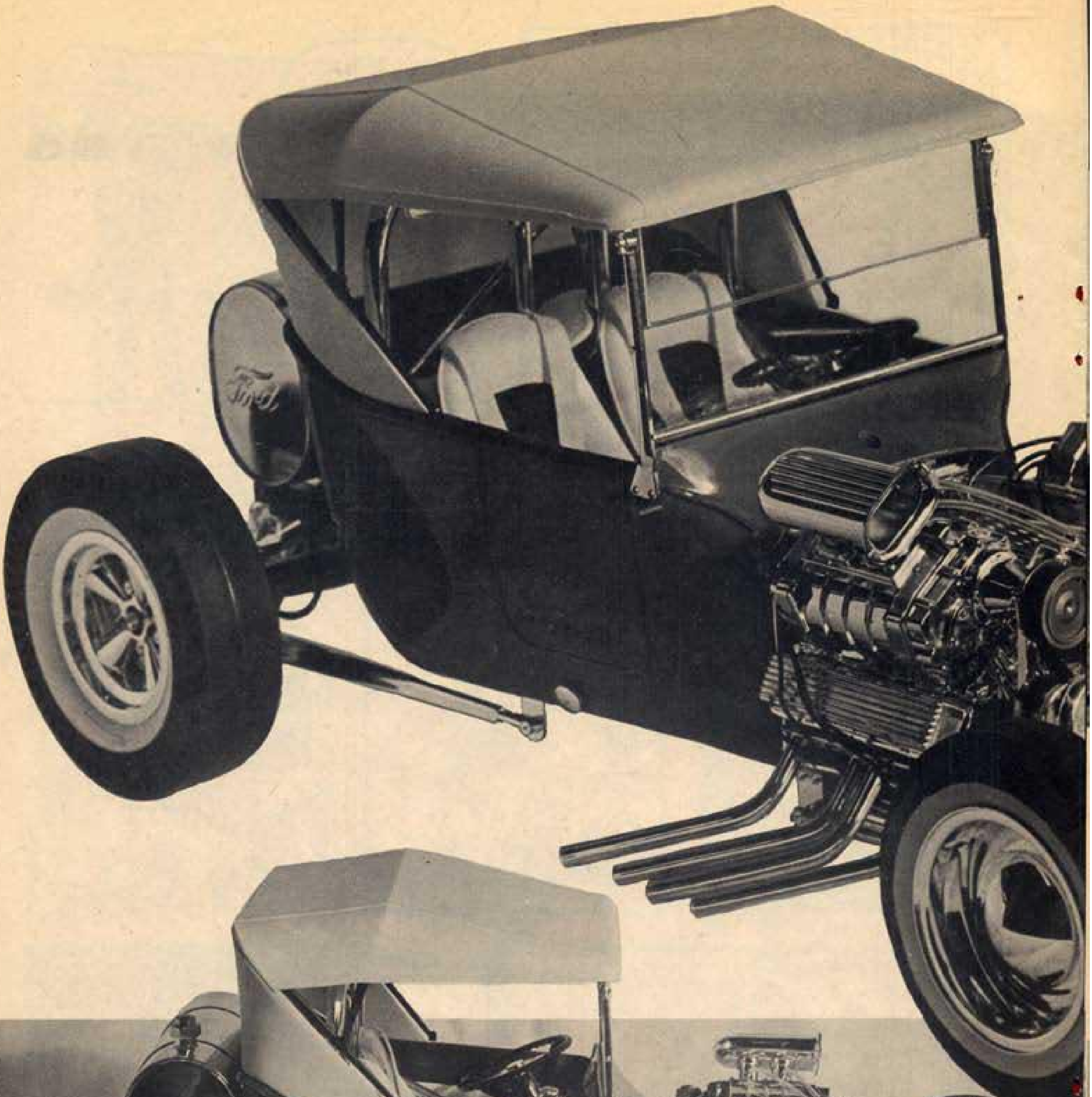
Side panels will have to be extended approximately as shown. Cut lower edge of stock panel to form a smooth arc.

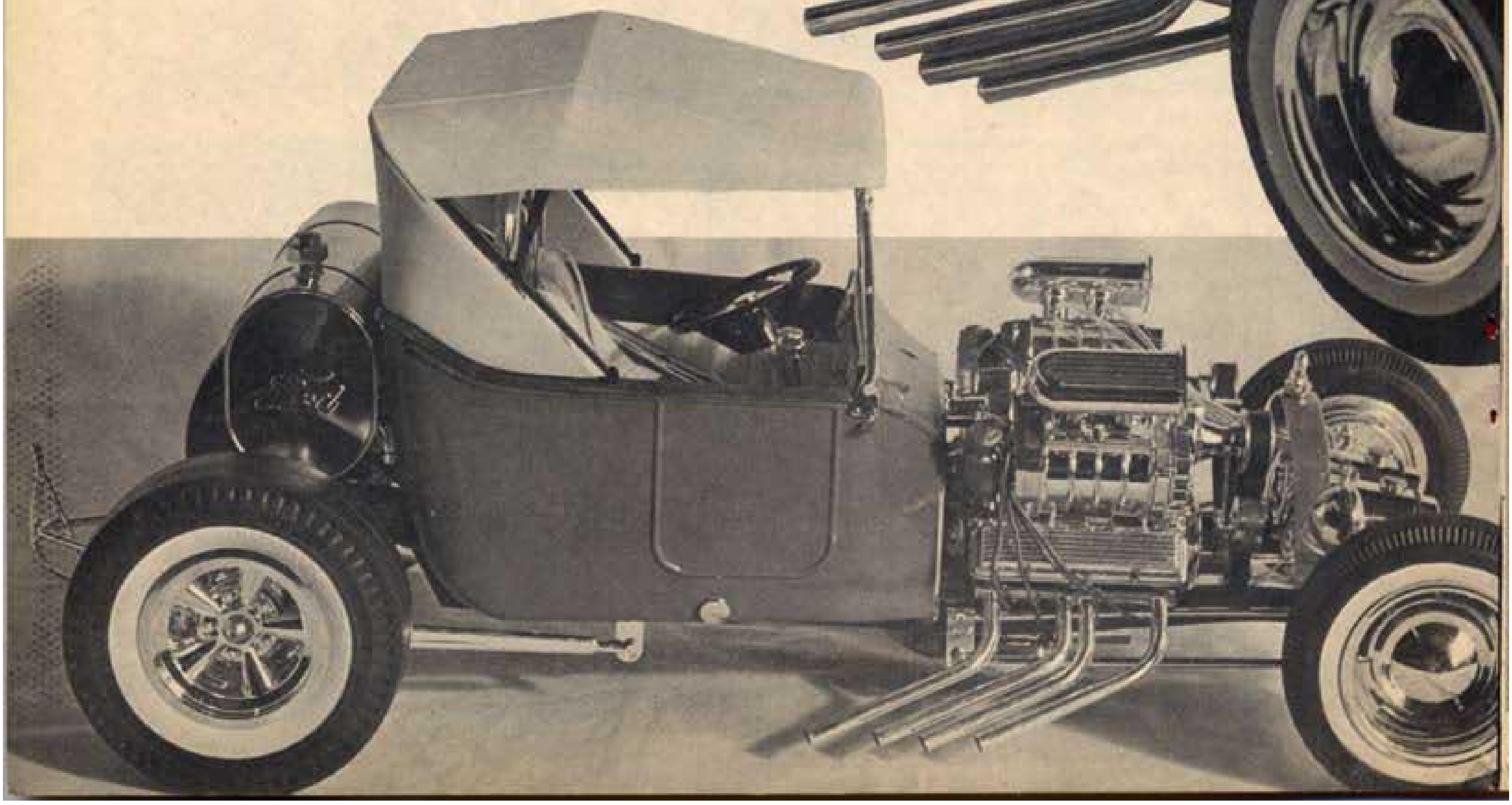


Following the text, hood is cut in three parts. Gaps shown are areas that will require filling with scrap from kit. Use grille and side panel assembly for alignment and to indicate amount to fill.


Kit Carson
story by Chuck Altizer
art by Ed Newton
HISTORY IN THE MAKING!! ...HO-BOY!
HOBBIES & THINGS
HEY, KIT! WHATCHA DOIN'!?
ARG!!! IT'S HARVEY HAZARD- THE HUMAN DISASTER AREA!!
SQUENCH!
WHERE YA GOIN' WITH ALL THAT MODEL STUFF, HUH?.... GONNA BUILD SUMPIN'?
...HUH!?
GO PLAY IN TRAFFIC, KID.
KLUB HOUSE
HEY, YA ARE GONNA BUILD A MODEL, AIN'TCHA? HUH!
FLAKE OFF, PEST!
BUG OUT, HARVEY... THIS MASTERPIECE IS GOING TO TAKE UTMOST CONCENTRATION.
GEE CRIMINETALIES, KIT! I'LL HELP YA... I WON'T BE IN YOUR WAY!...HONEST!...
...AW, C'MON...
CLUNK
WAAAK!! WHAT THE YOU DOIN?!!
OOPS!! ...JUST OPENING YOUR GLUE FOR YOU.


BACK, FINK!!
SCRUNCH!
MUGFF!
THIS BABY IS GOING TO BE THE ABSOLUTE ULTIMATE IN SCRATCH BUILT!
CRUNCH!
CRACK!
AAK! GET AWAY FROM THEM!
O.K.
CRASH
OH! LEMME SEE!! YOUR ALMOST FINISHED, HUH?! AREN'TCHA, ...HUH?!!
YECH!!
SLIP! SLICE!
SOMETIMES YOU ALMOST BUG ME, KID!!
THERE! IT'S FINISHED! IF YOU BREATHE, YOU'RE DEAD!...
HEY! NEAT!...
...IT'S JUST LIKE THE ONE I BOUGHT TODAY!!
COMPLETE OBLIVION!
THE BITTER END





The "INJECTOR"

A 1/8th SCALE BATTERY-POWERED DUAL ENGINE SHOW/GO DRAGSTER

By Bob Miller
Denver, Colorado

MY "INJECTOR" is a 1/8th scale dual engine show dragster that can be cut down to a high speed dragster with a few easy changes, such as leaving off the top.

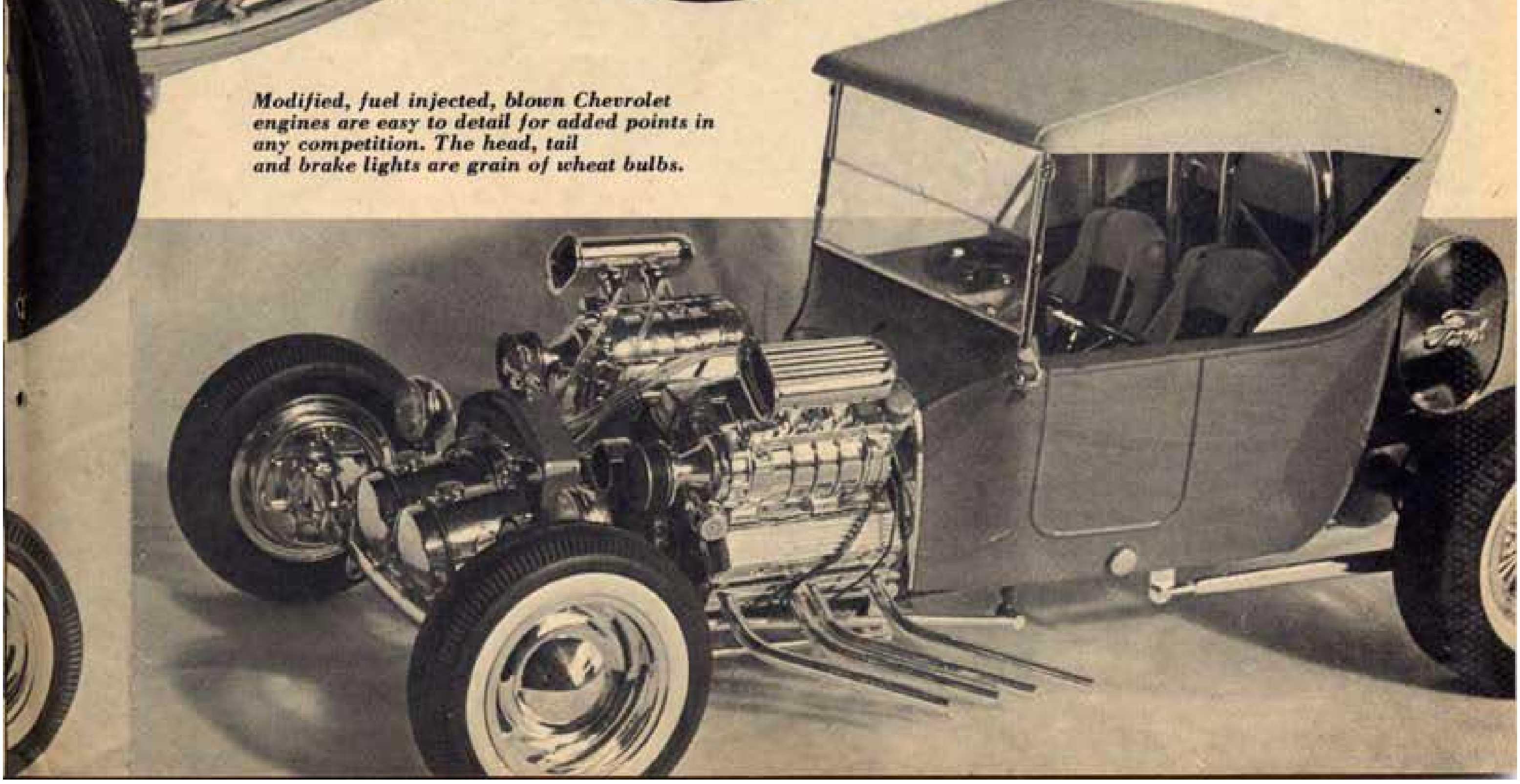
The body is Monogram's Big Drag. Altogether I used parts from 11 different kits in the 1/8th scale and spent about 125 hours building the car.

Here are the kits from which the parts were taken:

- Monogram kit #PC84 "The Big Drag."
- Monogram kit #PC78 "The Big 'T'."
- Two Monogram kits #PE62 "Chevrolet V8."
- Two Monogram kits #AK203 Racing Set.
- Two Monogram kits #AK204 GMC Blower Set.
- Two Monogram kits #AK100 Electric Motor.
- One Monogram kit #AK200 Electric Motor.



Modified, fuel injected, blown Chevrolet engines are easy to detail for added points in any competition. The head, tail and brake lights are grain of wheat bulbs.



Both of the dual engines idle when you turn a switch on the dashboard. By shoving the floor shift lever forward the car is put into gear and the rear wheels spin. Another switch on the dashboard turns on the headlights and taillight. The brake light operates when the brake pedal is pushed. This operates even when the taillight is off; when the taillight is on and the brake pedal is pressed the taillight brightens. The car also has operating steering.

The two engines are modified, fuel injection, blown Monogram Chevrolet engines. Two small electric motors, one in each engine, power the blower and drive belt while the car is idling and also while it is in gear.

The power for the drive train in "Injector" is a Monogram AK200 motor which I hid under the driver's seat, and covered with a base plate. The switch that turns this on is located in the gearbox and is operated by the gear shift lever.

The brake pedal operates the brake light by a small pressure plate which makes contact when the brake pedal is pushed, turning on a second bulb in the taillight.

All of the power for "Injector" is supplied by four C size battery cells located in the rear dummy fuel tank.

Some of the other components of "Injector" are:

The roll bar is a pair of standard roll bars which have been connected to make one dual roll bar.

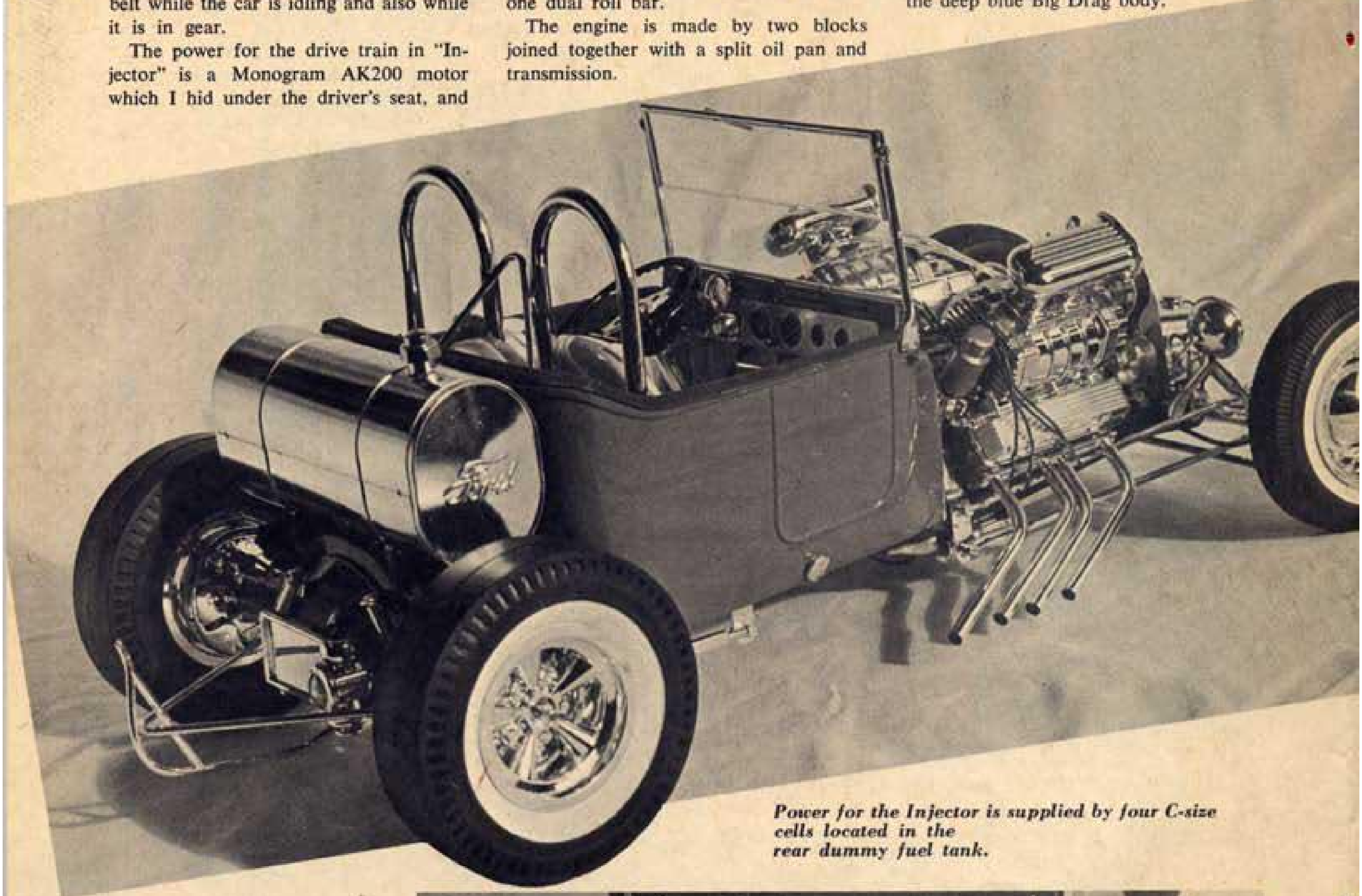
The engine is made by two blocks joined together with a split oil pan and transmission.

Fuel is supplied through two up-front Moon pressure tanks, each of which has two fuel lines leading to the fuel injection unit.

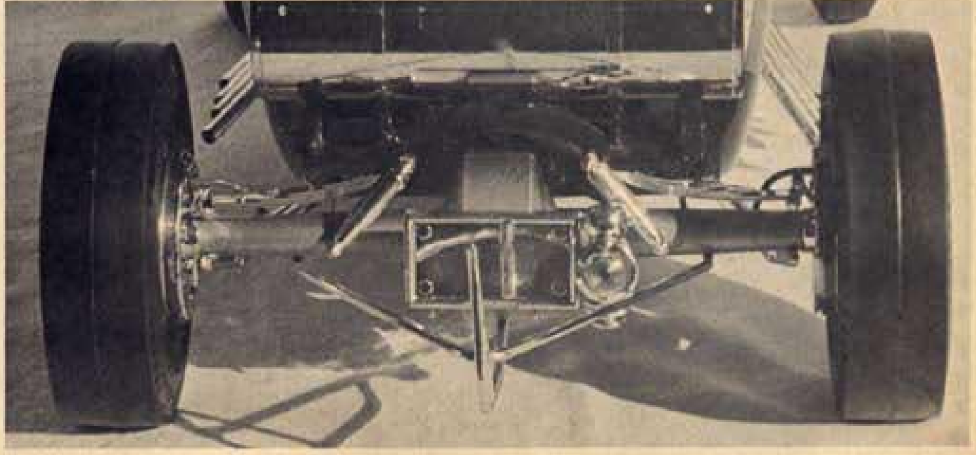
The steering wheel is a combination of the steering wheels from the Big "T" and the Big Drag. The white top also comes from the Big "T" kit.

The head, tail and brake lights are three-volt grain of wheat bulbs.

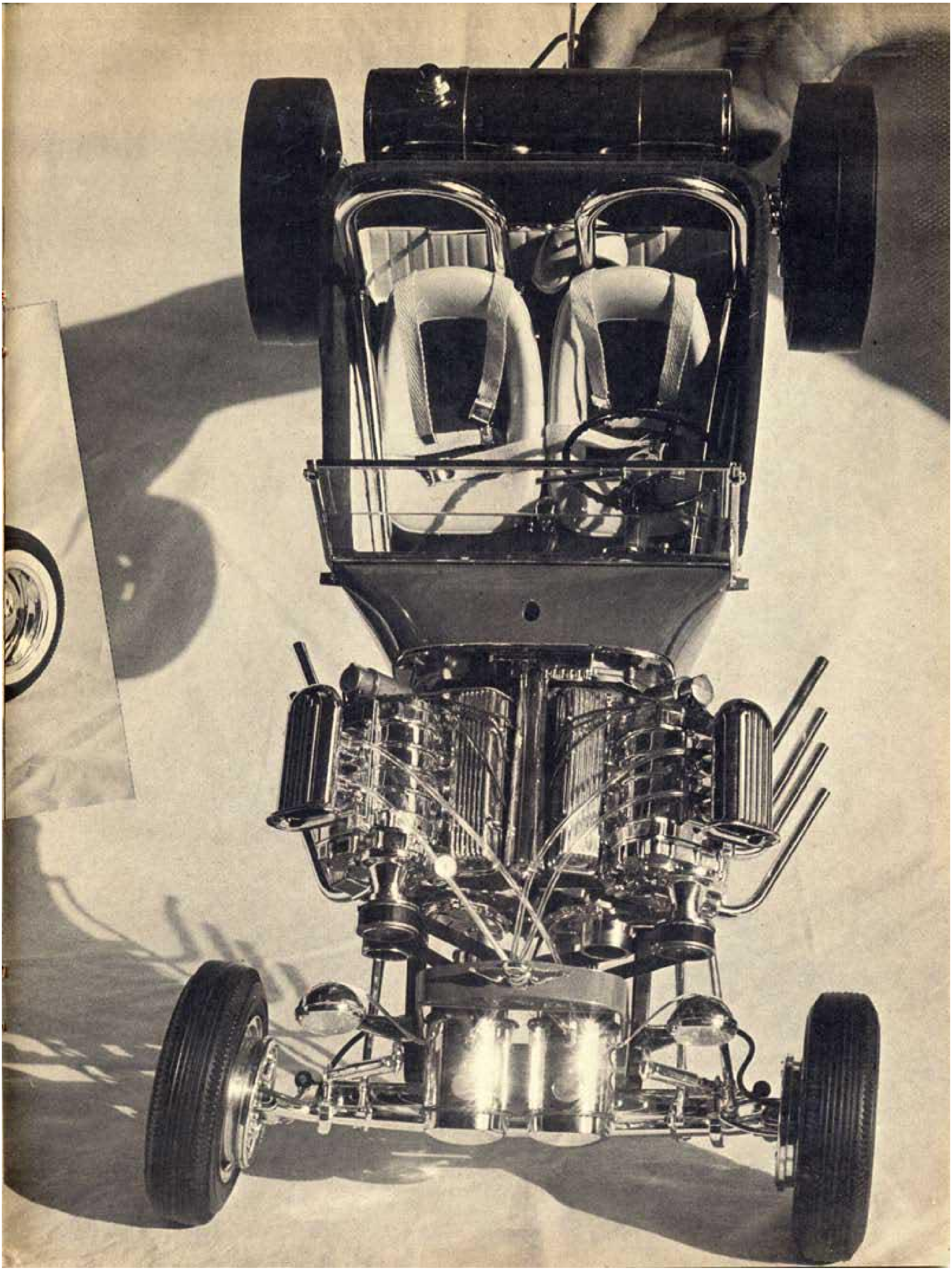
Upholstering and interior are all done in an adhesive backed flocking material. The seats are upholstered in deep purple with white trim and the floor upholstery is black. The engine is metallic heather. These colors make a nice contrast with the deep blue Big Drag body.



Power for the Injector is supplied by four C-size cells located in the rear dummy fuel tank.



A Monogram AK200 motor powers the drive train for the Injector. Hidden under the driver's seat, it is covered with a base plate. The gear shift lever is the switch that turns on the juice. Brake pedal operates the brake light by a small pressure plate which makes the contact.

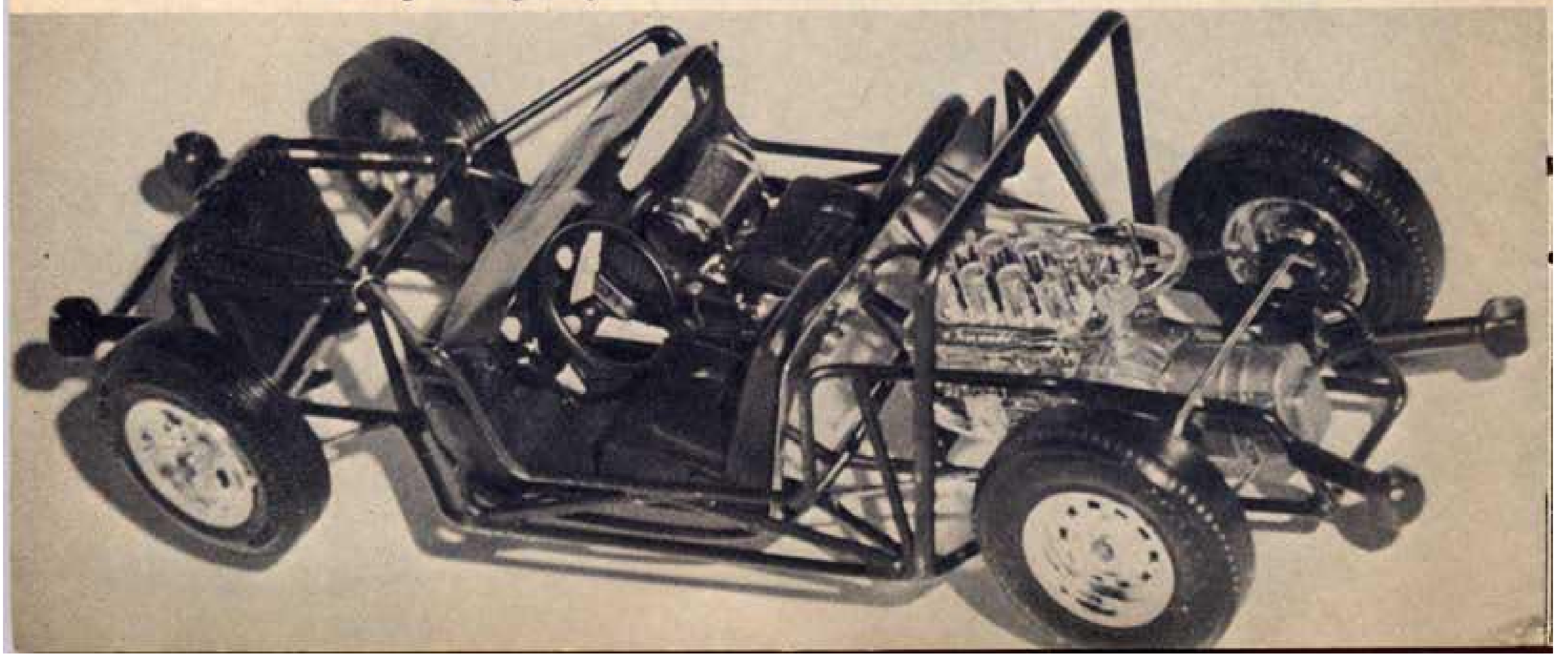




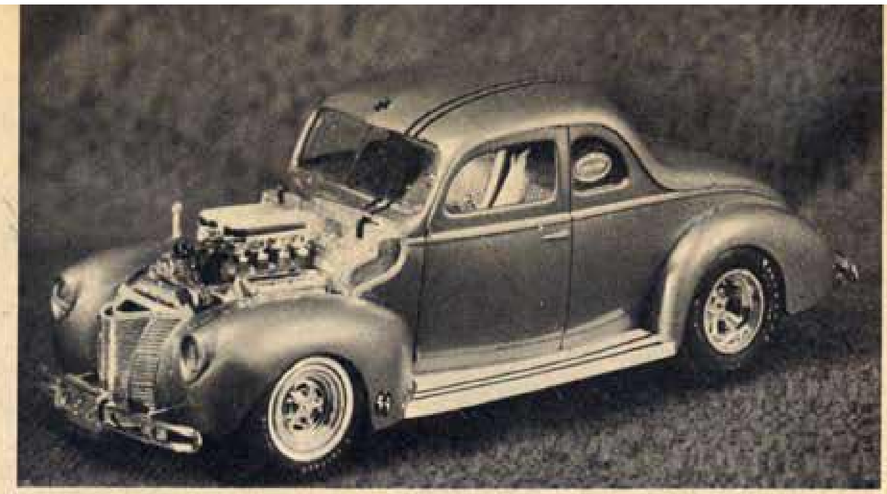
CONTEST WINNERS

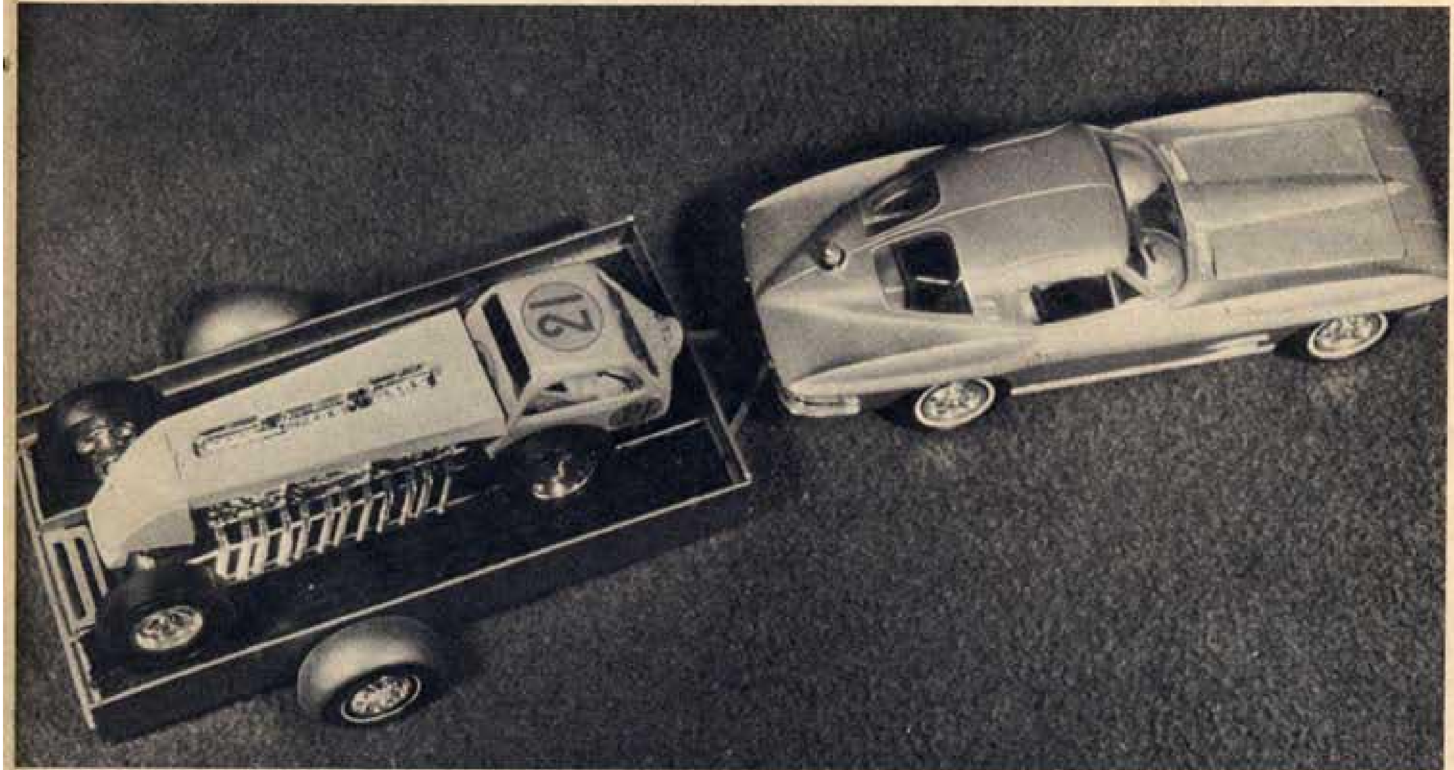
Gerald Julian of Seattle is this month's winner of the $25.00 U.S. Savings Bond. He earns it through work on this fabulous '64 Mustang with a rear mounted Chevy engine. The chassis is scratch built from bits of welding rod. The rear end is torsion-sprung and consists of Lotus parts. The Chevy V-8 is fully wired and real oil will leak out if you remove the transmission drain plug! The kit was basically AMT's Mustang but the top and other body panels have been extensively reworked. Color is Mustang's "Racing Orange."



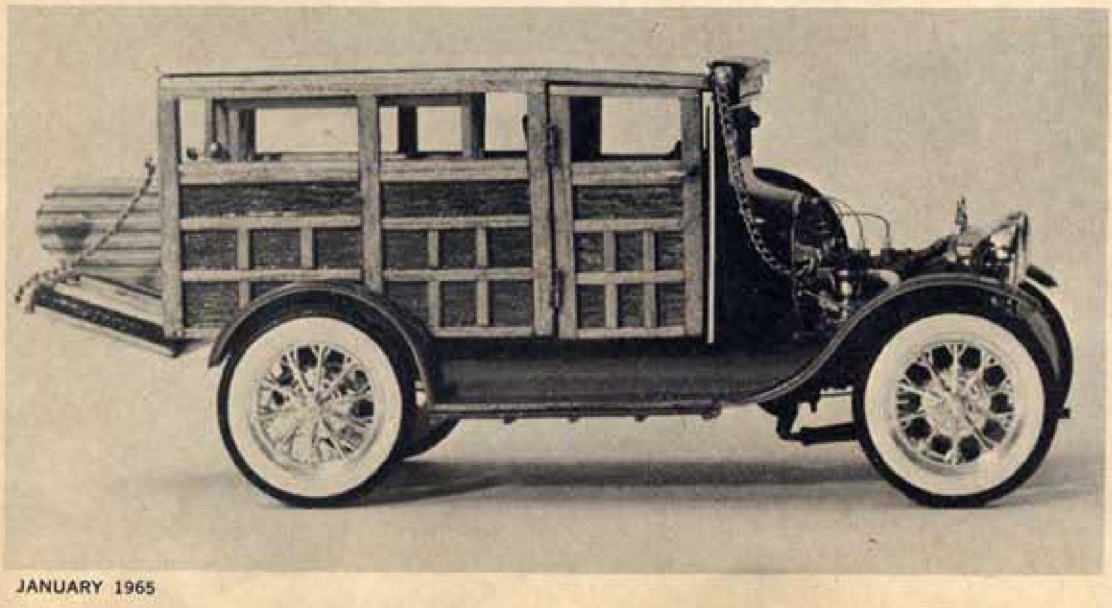


Thirteen-year old Mike Guilfoil of Fitchburg, Mass., has spent considerable time on his '40 Ford in which he has placed a DeSoto engine with eight 2-barrel carburetors. Black and white photos do not do the beautifully painted coupe justice, but the exterior is three coats of Pactra's base gold and nine coats of Metallic Burgundy with a resultant bright sheen.

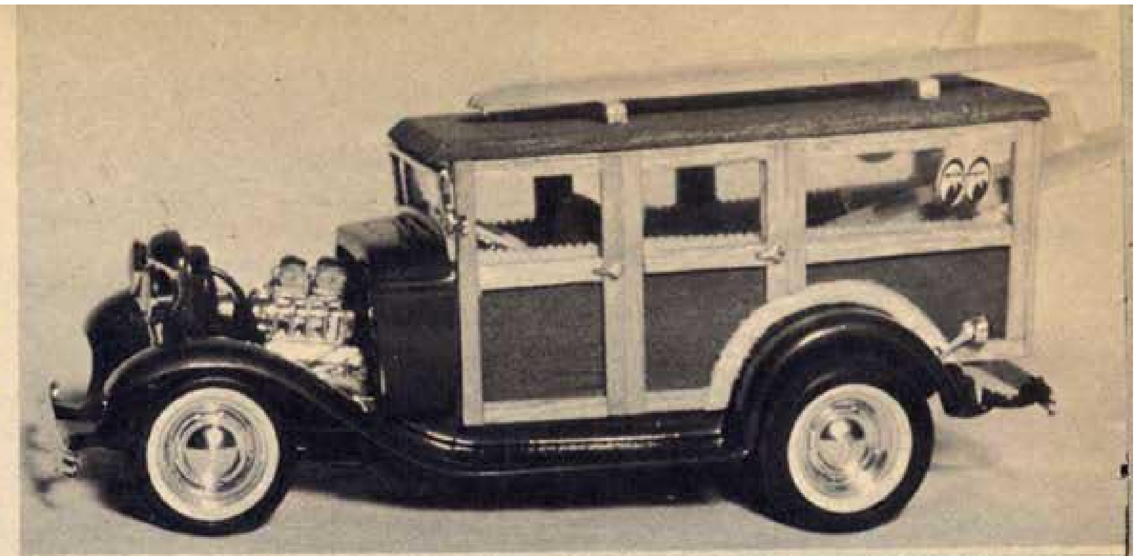




Three supercharged Pontiac engines power the "Cyclops Mark X" dragster of Leo Reinsmith who hails from Weisbaden, Germany. Body is an altered Fiat. A well detailed 'Vette does the hauling chores, and the dragster's trailer is a scratch built item from castoff kit parts.



"Gosh-a-whillickers!" would exclaim Grandpa if he caught sight of 18-year old Dick Taylor's rather way-out T wagon. Pactra's Candy red with Copper underbase was sprayed on parts not wood.

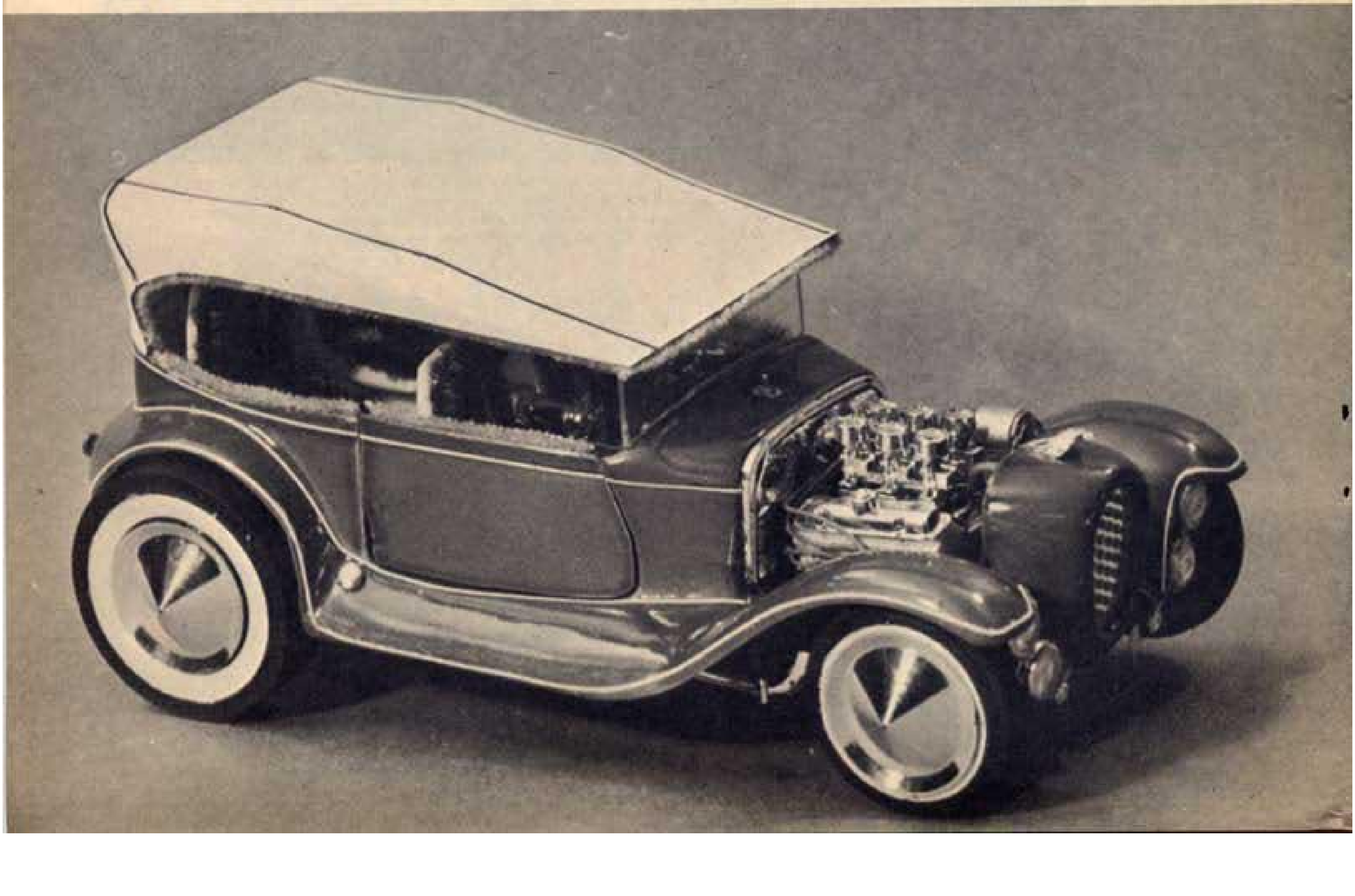


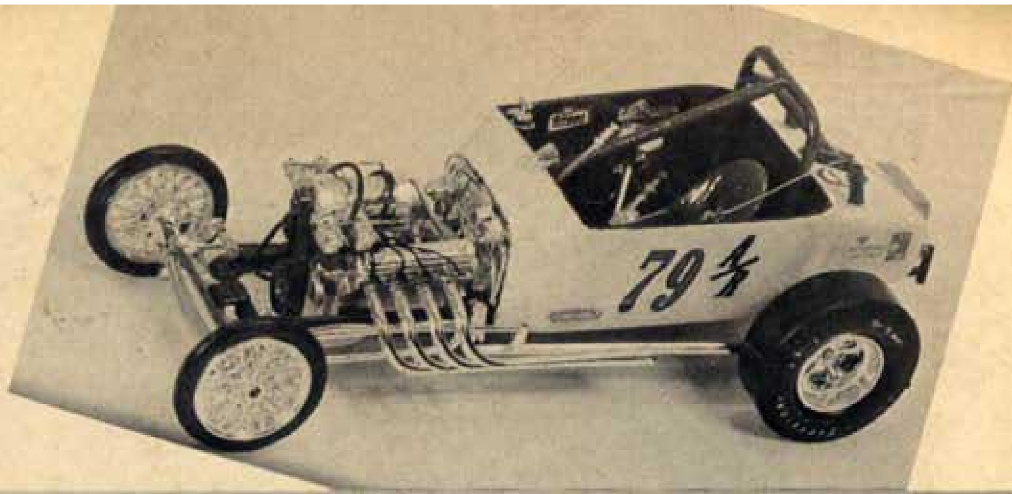
Two show trophies have been won by Dan Molidor's Deuce woody. The wagon started life as a 2-door, but Dan has fabricated a body (and a surfboard!) from scrap pieces of balsa wood.



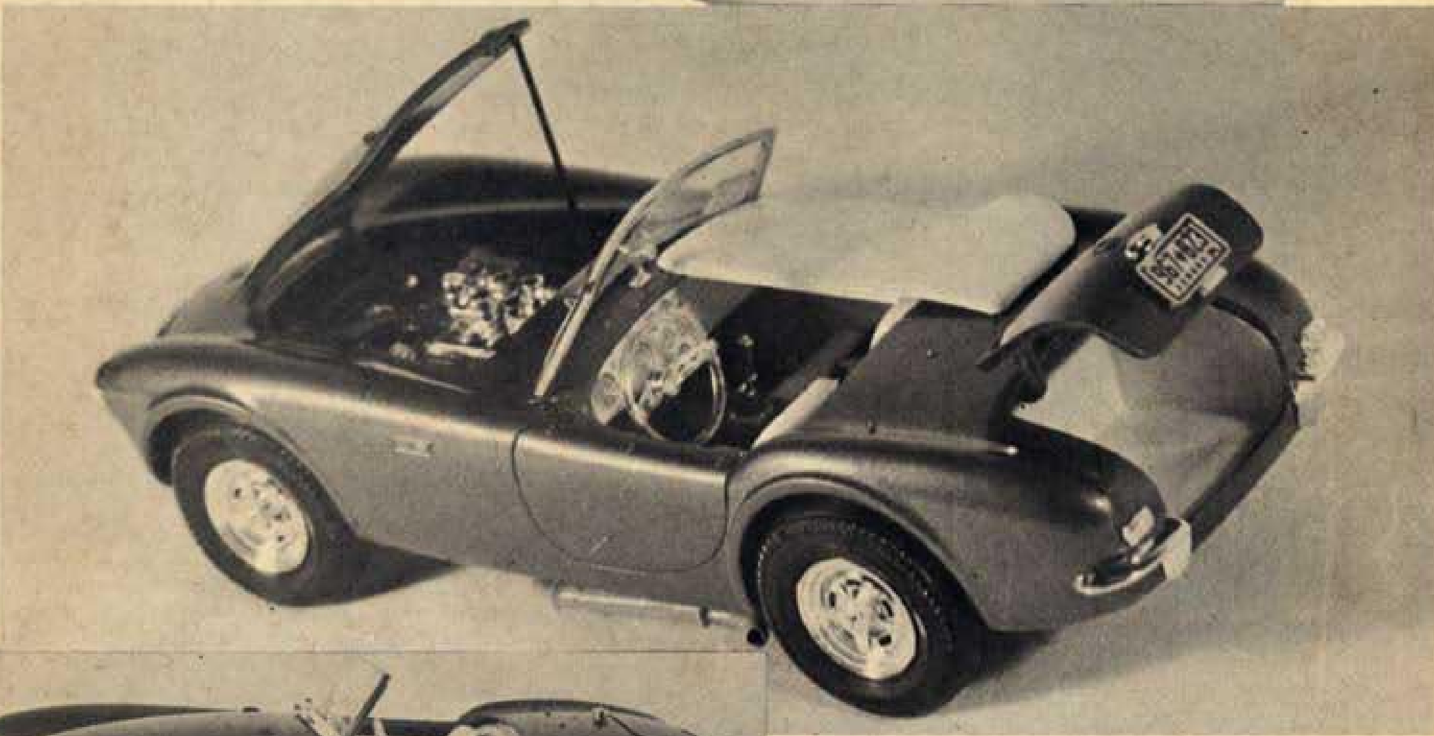
Ronald Lilly, from Milton, West Virginia, has gone all out on his faithfully duplicated Willys pickup, complete with working doors (upholstered, too), tailgate and hood. The engine is a wired Olds and the paint Candy Red.

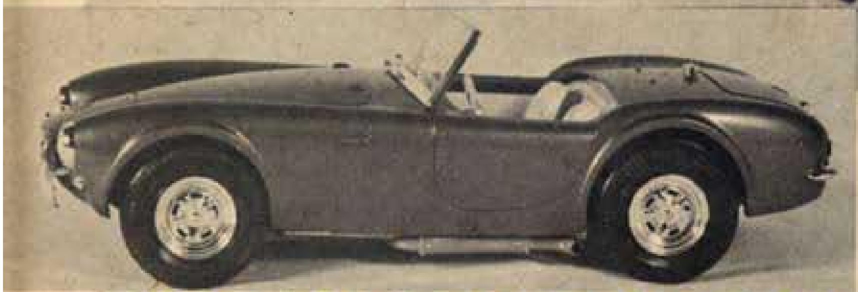
Opa-Locka, Florida, is home to Dennis Doty who comes up with this great '30 Ford phaeton, or "tub" as they used to be called when your Editor was young (!) The body has been sectioned and shortened and the nose is from an Ala Kart kit.





A blown Lincoln powers Jerome Vigdahl's nifty A/Altered Roadster - which is based on the popular 25 T coupe kit. The big mill is completely detailed as is the unseen but appreciated chassis.





Ford-powered Cobras are all the rage today, and Don Neukuckatz has gone wild on detailing his. Engine, chassis, interior and exterior are all as they would be on the full-sized car. Even the trunk is detailed.

a MODEL CAR SCIENCE *Contest*

FOR MODELERS EVERYWHERE . . .

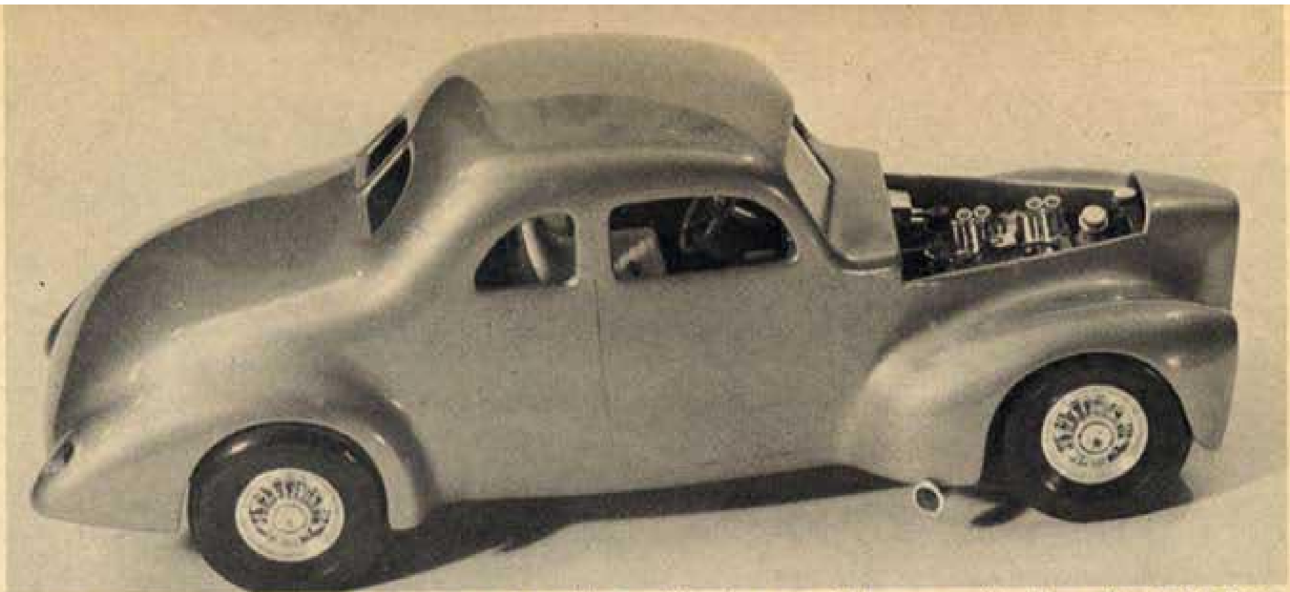
Each month the editors of MCS will select, from PHOTOS submitted, the top model car. It will be shown on these pages and its owner will receive a $25 U.S. SAVINGS BOND

SEND A PHOTO OF YOUR PRIZE MODEL TODAY TO:



MODEL CAR SCIENCE
Contest Editor
171 So. Barrington Pl.
Los Angeles 49, Calif.

You may submit as many entries as you wish. Send photos only, please. NO KITS. Include your name, address, age and information on how you built the model. Only CAR models are eligible. We cannot return any photos submitted.

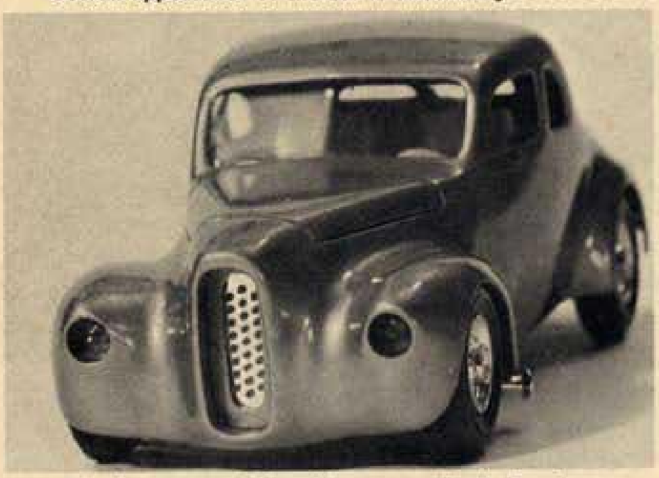


Overall appearance of the car is undeniably a '40 Ford but modifications seem to improve rather than change the lines.

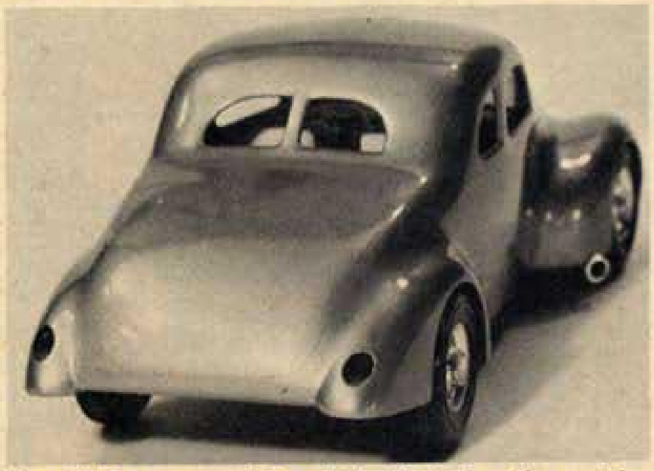
FOREVER FORD

Crisp, smooth lines on this '40 Ford caught the judge's eye during the Revell-Pactra National Contest

By Bob Paeth



The grille from the Ala Kart kit seems to be right at home in this '40. The pancake hood has an excellent fit.



The taillights are tunneled perfectly. Notice how they match the headlights and grille styling, good planning.

In looking at the thousands of cars entered in the Revell 2nd National Contest, there were some that stood out but just didn't have the few extra points needed to become a champion. Because of the excellence of these cars, MCS has decided to periodically feature one of these cars. In this way, these deserving cars will receive the attention they should have.

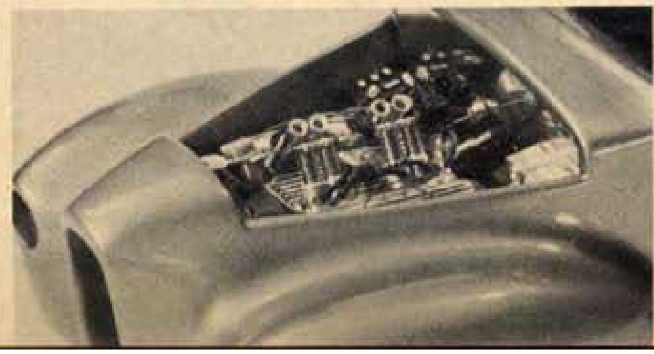
The car this month is a '40 Ford coupe, painted a metallic light green. Instead of many particular ideas or features making this car outstanding, there is only one. But the "one" should be spelled in capital letters. What makes this car a stand out is the crispness of lines accented by the overall flowing style. Too often when considerable body work is done the end result reminds one of a soft chunk of warm putty. One feature blends into another and each loses its identity.

The first item that attracted me to this car was the taillights that are tunneled into the fenders. Where most cars would have thick, rounded corners, this car had sharp, crisp edges. The bullet taillights were prominent but did not destroy the smooth effect of the rear end styling. The headlights and grille opening were also crisp and "clean" looking. The grille, itself, was taken from the Ala Kart kit and modified to fit, and done very well too! Pontiac wheels from a kit several years back are a pleasant change from the chrome reverse wheels and all the mags normally used.

The engine compartment was very neatly done: From the fully wired, injected engine to the all-chrome firewall; from the battery with its cables to the chrome radiator cap. Although the hood was not hinged, the fit was very good.

What really accented the crisp lines of this car was the molded-in fenders. The radius between the body and fenders was "in scale."

Notice, too, the ground clearance of this car. This shows that to have a good looking car one does not have to lower it to the level of a caterpillar. It's the overall appearance that a car is first judged on. The paint, color, body lines, wheels, etc. all play a part. This car plainly shows considerable planning.



Observe "finished" engine compartment. The necessary wiring along with chrome firewall — fine.

TABLE TOP RACING SECTION

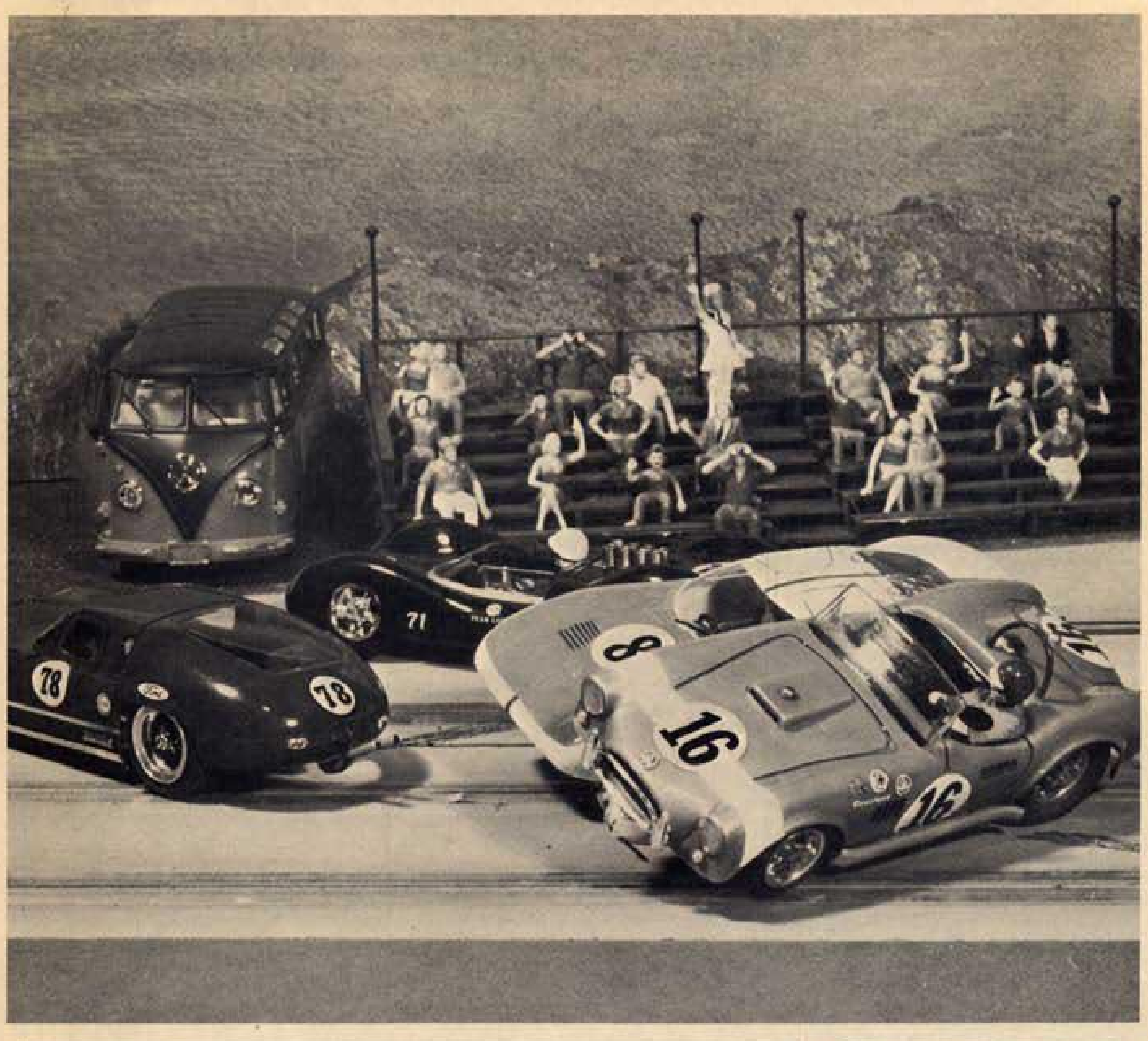


PHOTO CONTEST

Each month Model Car Science will award valuable prizes to the readers who submit the best photos of slot racers in action. Send your photos to: Table Top Photo Contest Model Car Science, 171 Barrington Pl., Los Angeles 49, Calif.

THIS MONTH'S PHOTO CONTEST WINNER IS

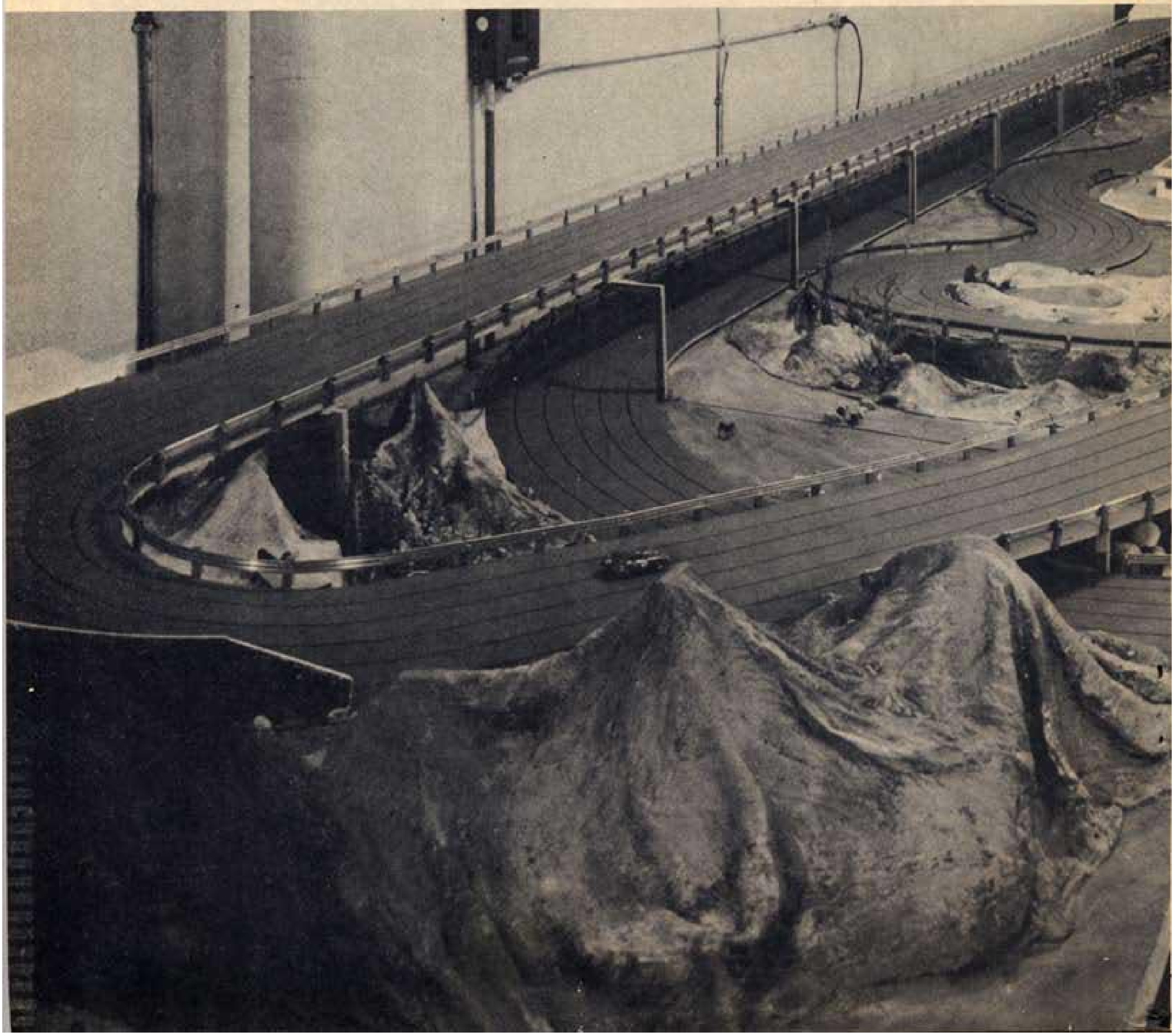
PAUL A. SCOTT
10570 Larry Way
Cupertino, Calif.

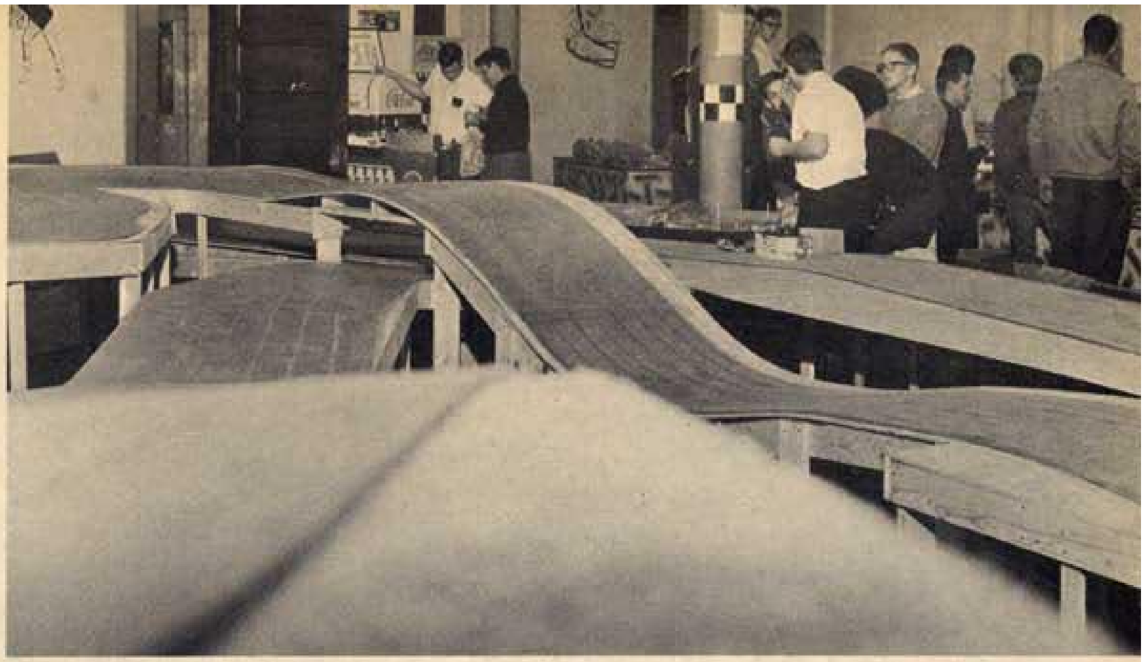
Spotlights: TRACK of the MONTH

ZOOM

Slot racing has come to Western Canada in a big way with the establishment of Zoom Miniature Race Tracks, Ltd., in Winnipeg, Manitoba. Zoom's main track measures 161½ feet in length, the largest indoor facility of its kind in that part of Canada, and is laid out in accord with the measurements and specifications set by the American Miniature Slot Racing Rules. In addition, there are several smaller setups, complete with miniature cars and equipment, designed especially for younger enthusiasts. Another large track and a drag strip are currently in the planning stages.

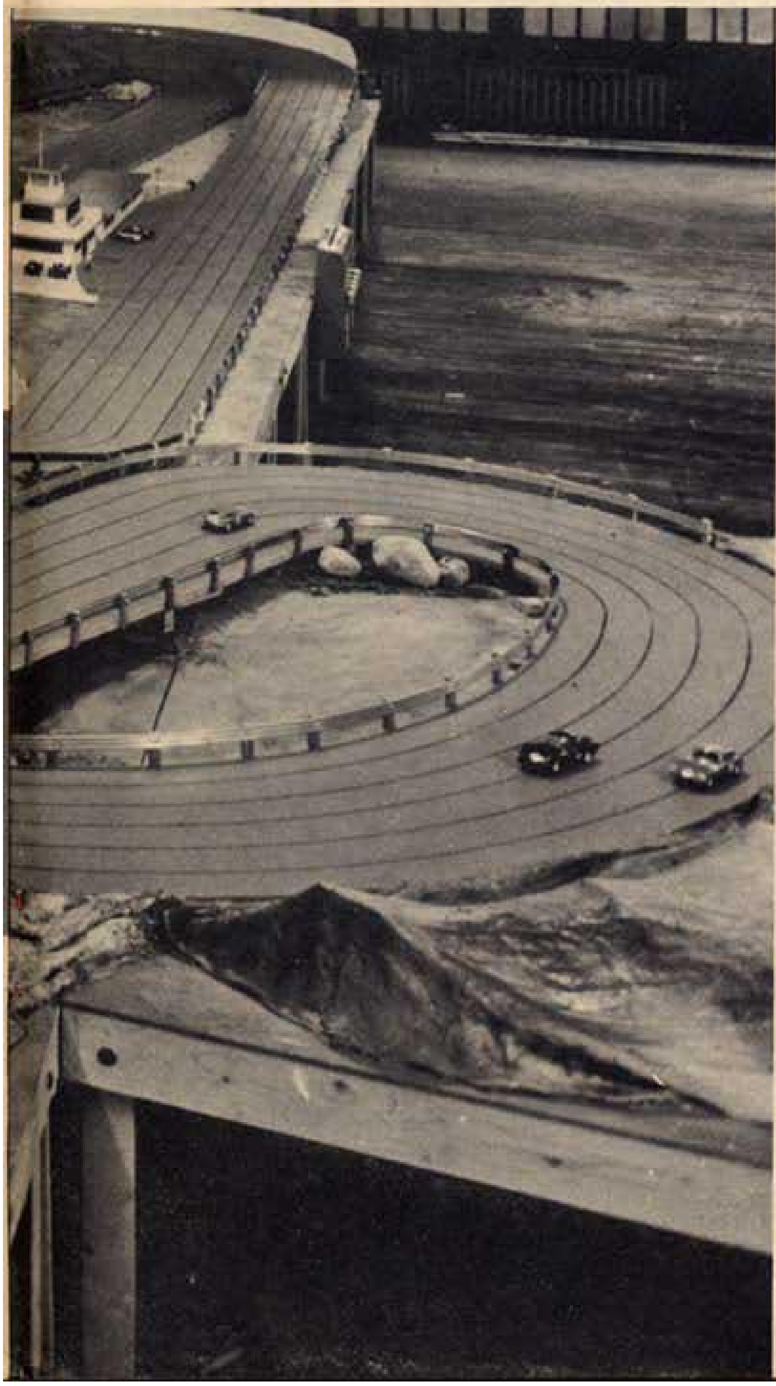
In addition to its facilities for racing participants, both individuals and organizations, Zoom sells, rents and services slot cars, parts, tracks and accessories. The firm is a welcome addition to the slot racing fraternity.





Additional big track is under construction. Drag strip is also planned for complete racing facilities.

Zoom's present big track (below) measures 161½ feet in length, is largest in its part of Canada.

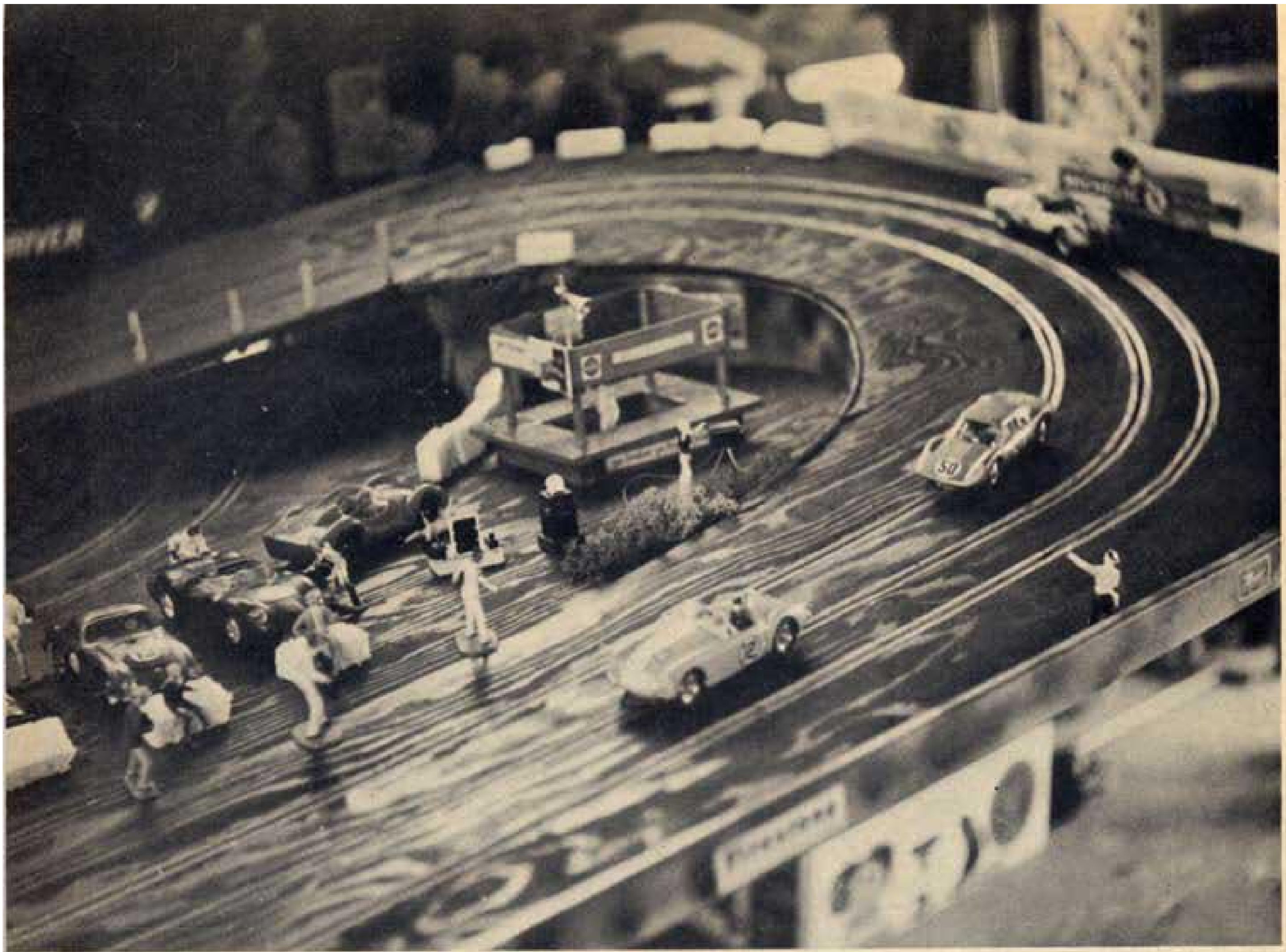




Inter-club competition is popular at Zoom. Track caters to all racing fans, both individuals and organizations.



The action gets intense at Zoom. Both adult enthusiasts and youngsters get plenty of opportunity to race regularly.



ENLARGING YOUR RACE COURSE

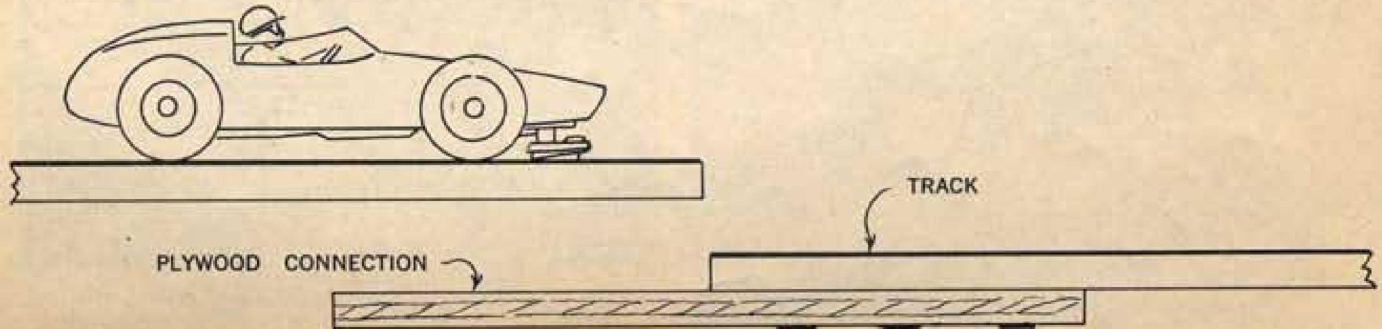
Here's a New Route to More Action

By G. Siposs

How many of you, owners of a home-made slot track, have ever wished at one time or another for a larger layout. Oh, sure, at the time you made it it took a long time and its dimensions seemed large enough. Soon after you started racing it probably seemed to shrink. Lately, the layout seemed all too small to satisfy you, yet, you do not want to make a brand new course. I went through the same dilemma, and here is how I solved it.

At one part of the course, where one of the straight runs parallel to the edge of the table I made an "L" shaped cut across the three lanes and along the in-field for a length of about 3 feet. I soldered the braided wire tapes at the point where they were cut and nailed them down to prevent fraying.

Then, I made the extension course on



a piece of plywood (you may want to use particle board or hardboard) in the shape I wanted it to be. The main point to note here is the fact that the extension is basically a closed circuit course. Along one of the turns I made another "L" shaped cut into the extension, and with glue and nails, I fastened a piece of 12 inch long plywood (under the cut half) so that it extended from the track extension for half its length. A similar piece of plywood was fastened under the "solid" part of the *original* course. Two legs were fashioned for the extension and made so that they can be hinged up and stored when the extension is not in use.

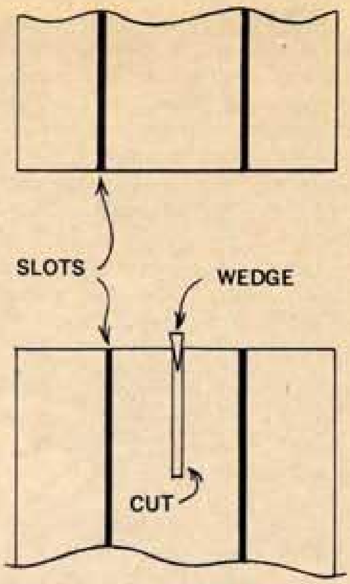
Now, in a manner somewhat resembling a Chinese puzzle, the original track and the extension are mated. Two upright pieces of plywood raise the overpass to the proper height to let cars pass through. At the mating point, the track surfaces are pulled down to the 12 inch pieces of plywood with wingnuts placed between the slots so that the cars are not impeded at all in their motion. At one point the mating slots did not match perfectly so I cut right through the track surface for a length of 6 inches and inserted a wedge in this slit to pry the surfaces apart and thus align the slots.

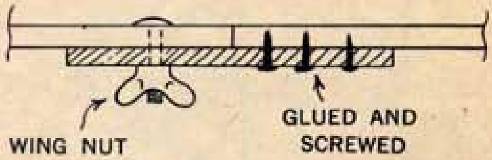
The advantage of this arrangement is that if it is set up in a garage, it still allows sufficient room to park two cars. All you'll have to do is detach the extension and re-connect the original track using one wingnut to pull the cut portion down to the 12 inch plywood.

The extension section can also be used *by itself* when detached from the basic course. Again, a wingnut is used to pull the halves together at the cut section. The 12 inch piece of plywood serves as an alignment piece. The small section can be used for short races or for tuneup purposes. I am planning to make several different, interchangeable, extensions to introduce variety into my layout without resorting to making a brand new table, supports, etc.

The electrical sections of the course are connected together by means of extension wires and receptacles in a manner similar to the jumper wires used in long tracks to prevent voltage drop. Calmont's Stik-Trak tape was used to save time and provide serviceability.

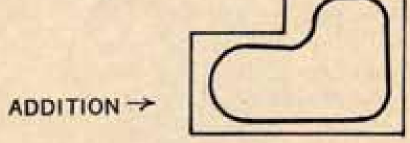
This arrangement opens an exciting possibility for a small group of friends. They can buy three ping pong tables

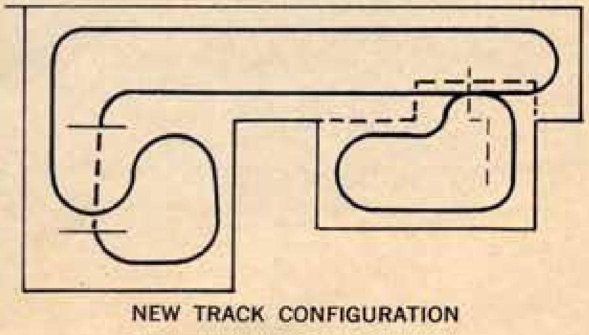








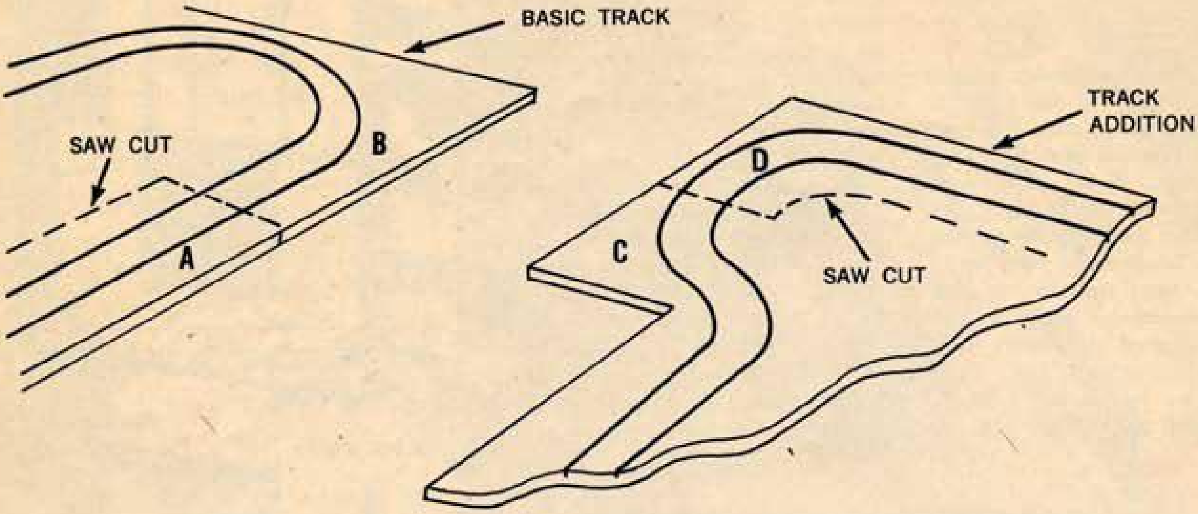


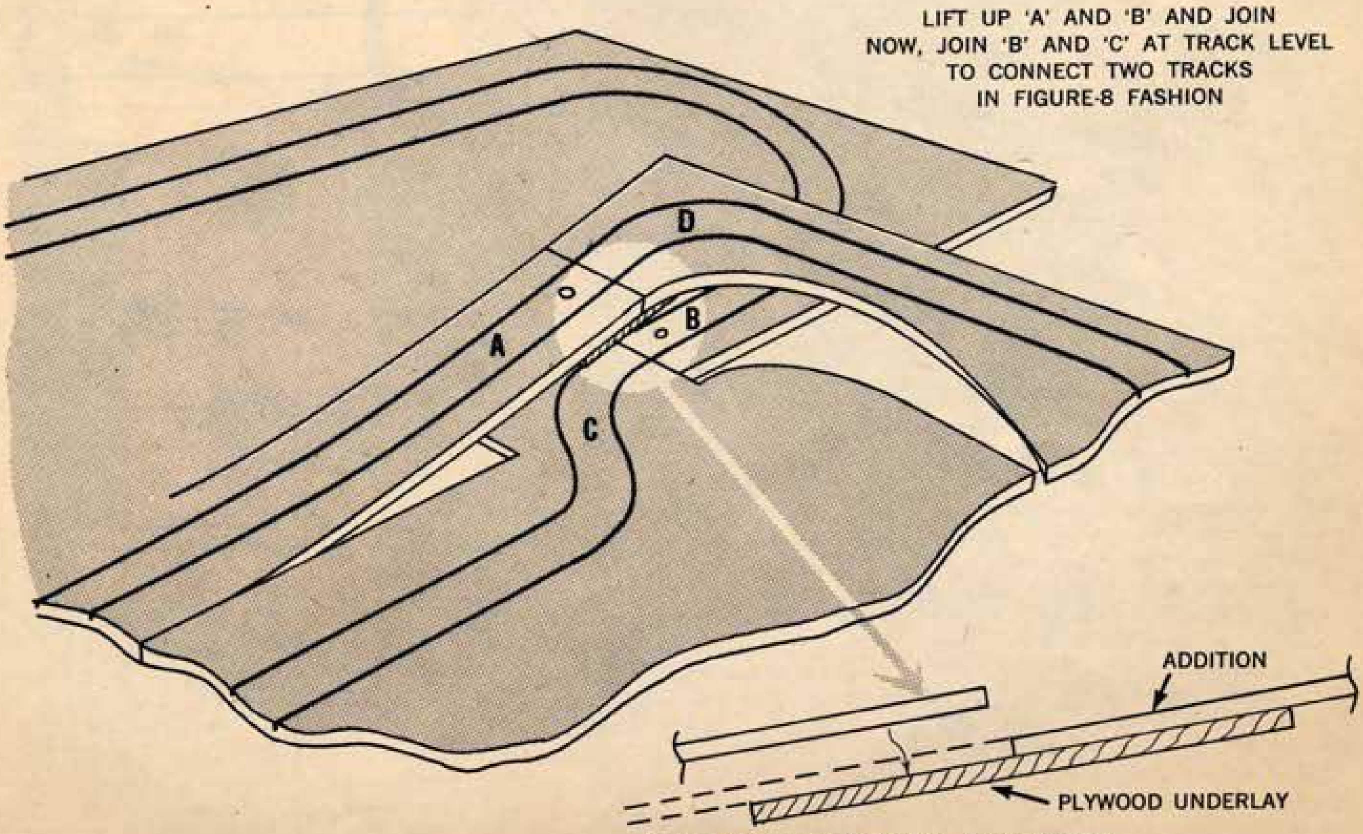


(collapsible) or similar size plywood sheets. Since each table consists of two halves, six fellows can cut a course of their own design on *their own* sections and practice on them in their own home. Come race time, they can meet in someone's garage, assemble the courses in the above described manner and have a whale of a race on the equivalent of three 5x9 foot tables, connected in figure 8 fashion.

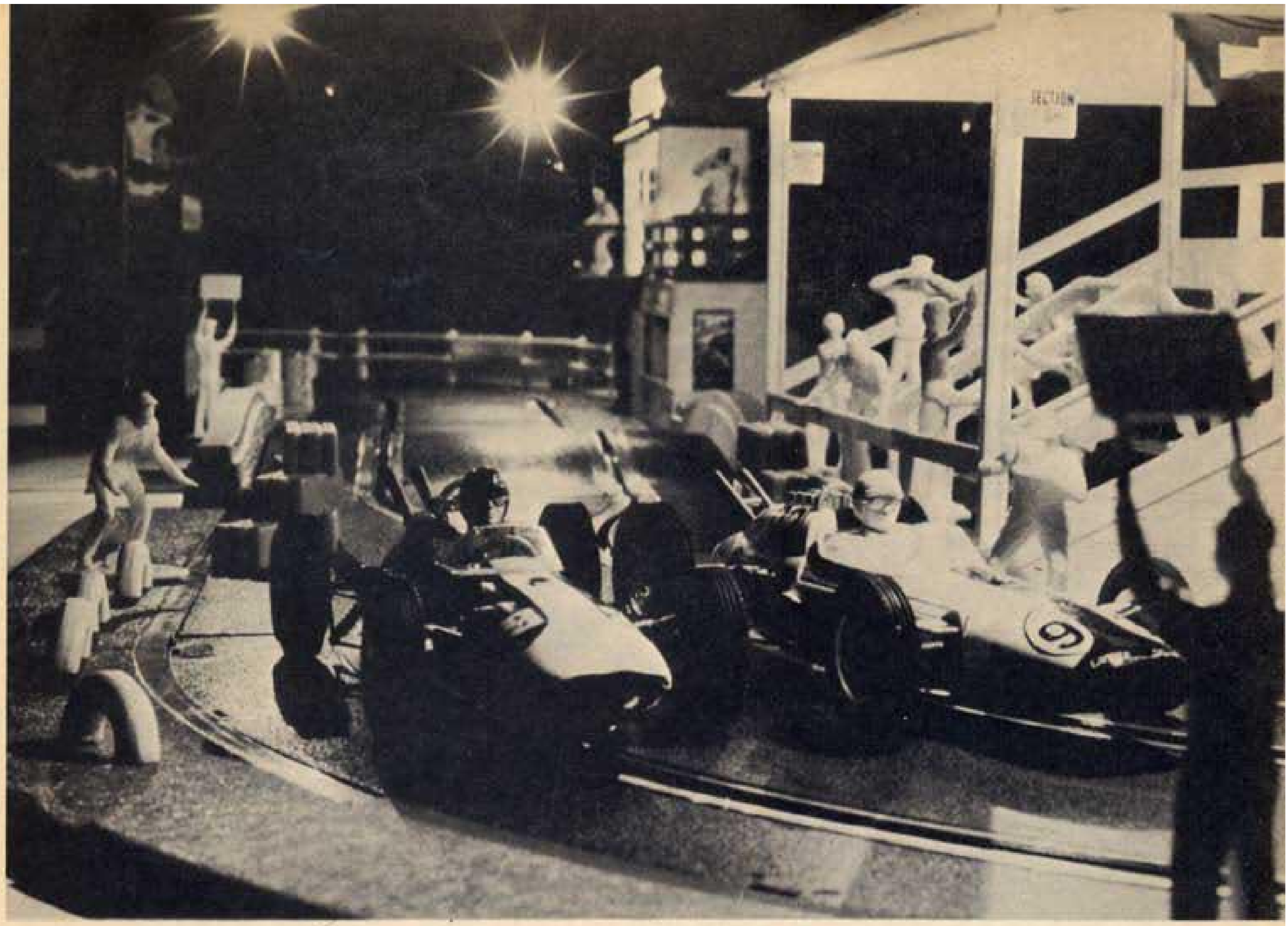
My track addition cost approximately $6 and a pleasant afternoon was spent doing it. It added over 12 feet to my track's lap length.







CROSS SECTION OF TRACK CONNECTION



A Friendly Way to Run Races

7 New ideas on how to stage exciting races

by George Siposs

There are many small tracks being built around the country these days. Each track has a few enthusiasts running cars on it. Sooner or later it gets to the point where a club is organized. Formal racing is usually the next step. This is still a long way from the "blood and tears" racing of semi-professionals though and, we (fellows running on my home track) felt that we had to come up with some fair and square rules. Some of us are just beginners owning only one car. To make the competition fair and to give everyone a chance, the following rules were evolved.

Since most of us have more than one car, it is obvious that some of these cars are faster than others. Thus we divided them into several categories: The slow "out of the box" cars went into the Production Sports category. Modified Sports Cars were slightly tuned versions of the usually available kit cars. More advanced models, such as four wheel drives and cars with headlights or swinging rear ends were put into the GT category and a special race was set up for them. The hand made cars, the fastest we had, were classified as Unlimited Class. Some of the cars were hard to classify precisely, so we entered them in more than one event. Now, the big equalizer is the way we chose the drivers. We put the names of all the drivers into a hat and drew lots. The first name chosen had first choice of *any* car in that category. Second name got second choice and so on. (If there were more names than lanes, eliminations or heats had to be run.) After the names of drivers and cars were thus matched, the last man was given his choice of track lanes and others could choose in a reverse order. Thus, a completely fair system was

achieved. Granted, you did not get to drive your own car maybe, however, we are all careful drivers and this way we could all have a chance at driving a variety of cars. This promotes good sportsmanship and a chance to gain experience. In each race, the winner received 5 points, the second car got 3 points and the third car got 2. A car that did not finish received no points at all. Thus, emergency repair work was encouraged. In larger clubs, a slightly modified point system could be used and perhaps an elimination heat system would have to be used to weed out the finalists for each class. On one night we had seven races on the card, and since we all raced different cars on different lanes, it was the driving ability that really showed up on the final tally.

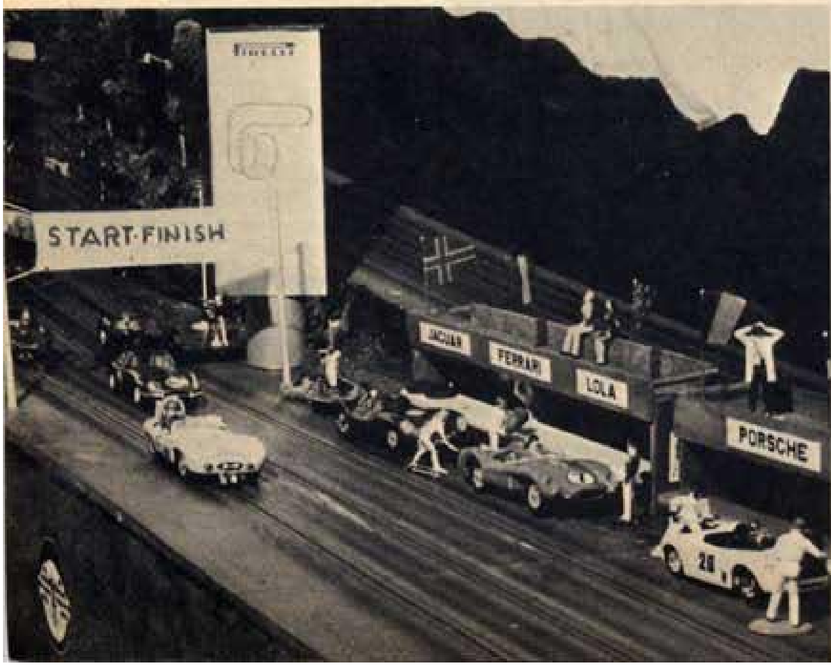
Here is a typical race program showing just what cars we had available and the rules for each race:

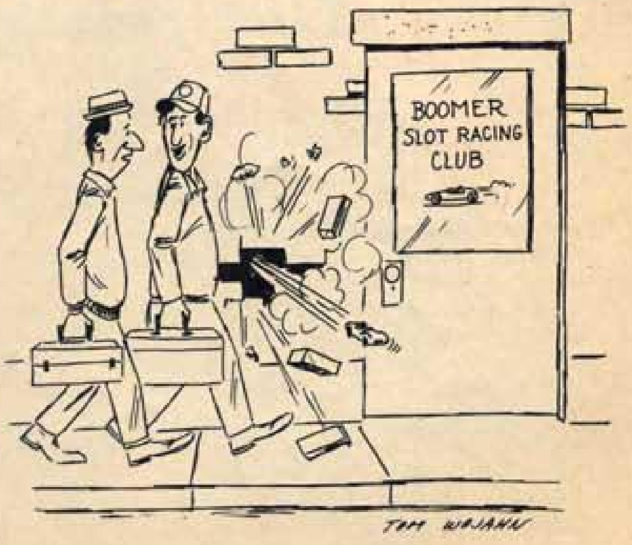


1. 25 laps, Production Sports Cars. (Strombecker Testa Rossa)
2. 50 laps clockwise direction (uphill) GT class, "Hillclimb Championship" (4-wheel drives)
3. Modified Sports, 25 laps, Heat I. (Strombecker with "race kits.")
4. Pittman Trophy Race, 30 laps. (Pittman motors only)
5. Day and Night Race, 50 laps. All cars with lights. Le Mans start, 20 laps in the dark.
6. Semi Final Unlimited Class, 75 laps. Hand-built cars. The order of winning shall determine the order of choice of lane for main event.
7. Grand Prix 100 laps. Le Mans start. Compulsory pit stop anytime after 25 laps to exchange rear tires. Marshal put a little oil on a corner after 50th lap.

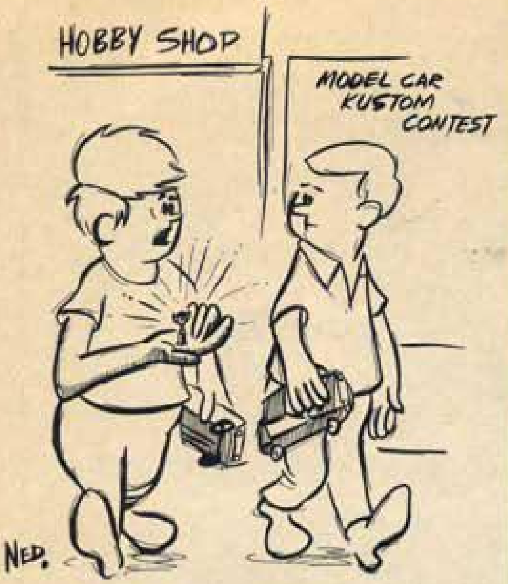
SOME OF THE RULES "OF THE HOUSE:"

- When two cars crash, the car causing the crash is to be replaced last.
- If car crashes out and remains upside down, it is disqualified.
- Lap counting to be done by drivers calling out their laps when passing the pits. (We had no automatic counters.)
- If car is defective it is to be pushed (in proper lane & direction) to the "start" line by hand in order to be called a finisher.
- Ten lap time trials to be run whenever a dispute exists, to determine the choice of lane, etc.
- If car falls off table through its driver's fault, it is penalized 3 laps.
- Race is re-started if major crash occurs prior to the completion of first lap.
- If the same car causes more than three crashes in any one race, it is penalized 3 laps.
- Points: 5 for winner, 3 for second, 2 for third. No points for Did-Not-Finish.





"We aren't using brakes yet!"



"I can't figure out if they're cheap with their trophies or just wild about 1/25th scale."

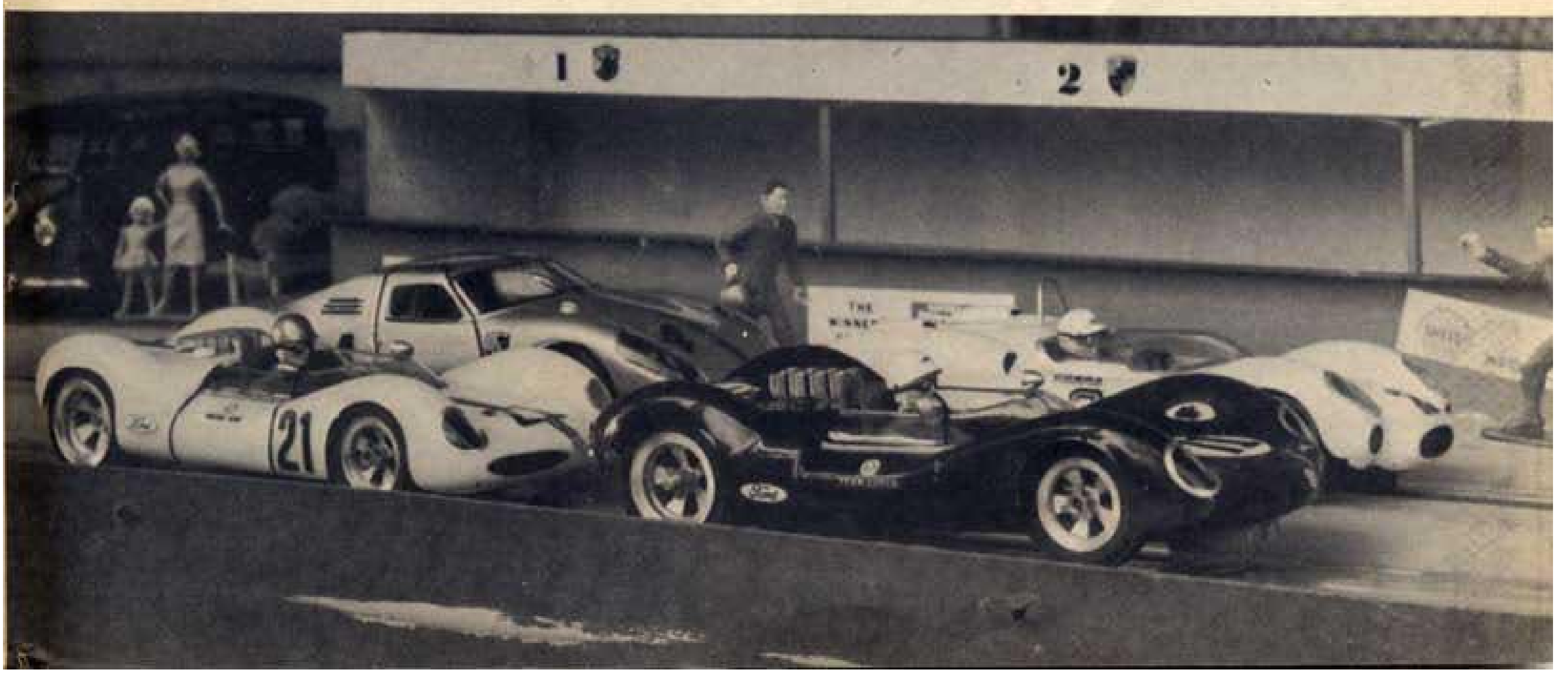


So here it is. A simple but effective way to run a friendly race in a democratic manner. Newcomers will benefit by having a chance to drive a good car. Old-timers gain by really driving hard to get a "dog" to the finish. Nobody is a pre-race favorite therefore the races are wide open. *This* is what makes competition interesting.

A race organized this way will take about 2-3 hours to run off since cars are being repaired and tested between the heats. Don't forget to add realism by playing a recording of car sounds and adding formal announcements: "Gentlemen, start your engines" and the like. Marshaling can be done by friends or members who are not running in the heat. Make sure they know which car belongs to which lane BEFORE the race is started.



"That's right — in three years of racing we've never had a car on the floor!"





PREPARING YOUR CAR FOR ENDURO RACES

Try these pointers for more performance from kit cars

By Raymond E. Hoy

SOMEONE FAR MORE LEARNED than I once said something to the effect: "The race does not always go to the swift." Just about anyone who has ever entered an enduro race can verify that statement. Unless you have discovered the secrets that Enzo Ferrari has learned, and thus are able to turn out cars that are both fast AND reliable, enduro racing can be one big headache.

It need not be a headache. There is no black magic involved in turning out a good looking machine that is both quick and reliable. One that can go the distance without coming unglued, (usually when you are well out in front with a sure victory in your grasp) one that is a pure joy to drive fast comfortably, without worrying about its ability to take every grinding lap on a tough circuit and still ask for more.

Let's look into this science of preparing a fast, dependable car. I believe cleanliness is a contributing factor in developing a reliable race machine. Your equipment should be scrupulously clean in all departments, motor, frame, gears, tires, etc. Dirt can do more harm to fast moving parts than hundreds of punishing laps can do to a clean, sanitary piece of racing equipment.

I always start preparing a race car by doing the wheels first. I am very particular about the wheels that I use, and I strongly favor set-screw wheels and plain axles over the popular 540 threaded axles and knockoffs. If you have ever used set screw wheels you realize how easy they are to adjust for precise tread settings, and how totally reliable they are, as far as staying "put" once they are positioned on the axle and tightened with an Allen wrench.

Make sure your axles are clean and perfectly true. You can roll each axle over a surface that you know to be flat, (a kitchen table, etc) and by observing it closely, determine if the axle is bent. If it is, no matter how slightly, discard it.

Slide one wheel on the end of an axle. Now, using contact cement sparingly, coat the inside rim of the wheel wherever the tire touches, and allow it to become slightly tacky. Then, take a good quality, STIFF racing tire, such as a Revell Goodyear or Dunlop, and slip it on the wheel. Here is probably the biggest single cause of mistaken wheel-wobble problems. Many times it is not the wheel or axle that is out-of-round, it is merely that the tire is mounted on the wheel rim crooked. Pull at the tire and twist it until you are perfectly satisfied that it is as straight on the rim as you can get it. Let them dry.



"Coat the wheel with glue and let it become tacky."

"Pull at the tire until it sets on the wheel squarely. Then let it dry."



Then, chuck the axle in an electric drill, and lay the drill flat on a table and turn it on. Apply a fine sandpaper block against the face of the tire while it revolves. Use light pressure.

When you are satisfied the wheel is round, do it in turn to all three remaining wheels and tires. You will find it is impossible to remove a really high spot on a tire just by sanding, because the tire has a tendency to sand to an egg shape, if it was egg shapped to start with. If you run into a really bad tire, get rid of it and start with another.

If there are any sharp edges on your tires, sand them off by lightly applying a piece of fine sandpaper while the wheel is mounted on an axle and turning in an electric drill. A sharp edge on a tire will result in too much gripping, and therefore distortion of the tread in a hard corner, with the result that the car will turn turtle with absolutely no warning.

When you are satisfied with your wheel-



"The wheel must be threaded on an axle, then chucked into a drill and sanded smooth. Apply light pressure."

tire-axle combination, set them aside and look your frame over. It should be rigid enough to maintain good motor-gear alignment. Wipe it down clean and check the bearings for wear. Each wheel bearing, whether it is a ball bearing or an oilite bearing, should be spotlessly clean. Run a pipe cleaner through the bearing and then lightly oil it, whether it is an oilite (self-lubricating) bearing or not. Many ball bearings are supposedly dry running, but I have yet to find a high revving bearing that doesn't seem to be more comfortable when it has a light oil bath.

Personally, for long distance racing, I much prefer a good old rugged oilite bearing. If it is clean and has no pitted areas before a race, you can be sure it will give your axles a nice, comfortable ride for as far as you want to go.

The pickup (flag) should have enough meat on it so it will not crack under the strain of knifing through corner after corner. The shank should ride freely in the bearing, and the collar-set screw mechanism that positions the height of the flag should be carefully adjusted to eliminate any vertical slop.

The brushes are very important, especially in long distance racing. You will notice erratic running, occasionally, after a spin, or a near-spin. Many times this is the result of one or both brushes having been splayed out to one side during the spin, thus causing spotty contact with the braid on the table. To eliminate this, I use new brushes before each long distance race. Besides using new brushes, I very carefully coat the INSIDE edges of the brush, (on the side facing UP, and not against the track) with solder. Don't coat it too heavily, however, or the springiness will be gone, and this is essential in providing good contact with the road. If you apply just a thin coat of solder, it will keep the brushes from kinking sideways during a spin, and also prevent unraveling.

The tiny screws that most manufacturers provide for insertion through the pickup braid and into the flag, give me hysterics. The end of the motor wire is supposed to fit under the tiny head of this screw, and it will . . . for about one lap. I usually drop these tiny screws into my parts box, never to be used again. Instead, I slip each new piece of pickup braid through the slots provided for this in the pickup, and apply the solder to the inside edges as I described above. Then I crimp the end of the braid over on the top surface of the pickup and prick a small hole through the braid and into the hole provided for the small screw that is usually used. Into this neat hole I carefully place the end of motor wire. Then I carefully apply a small spot of solder at the junction of the motor wire and contact braid, thus providing a good, SOLID and trouble free connection. Mount the wheels on the axles using Loctite. The motor should be carefully cleaned. Use a toothpick or similar piece of wood and clean out the slots between the commutator segments. Place the chassis on a test block (Dynamic models, etc.), and run some power through the motor and let it turn over slowly. Remove any grime from the commutator with a piece of light sandpaper and wipe it off with a rag. Check the brushes. If they look good enough to go the distance with no worries, leave them alone, except for wiping clean and dry with a soft, lint-free cloth. Give the spinning motor a light shot of carbon-tet and wipe it dry with the cloth, making sure the slots between the commutator segments are dirt-free. Check the motor wire connections, and if they don't look too solid, resolder them.

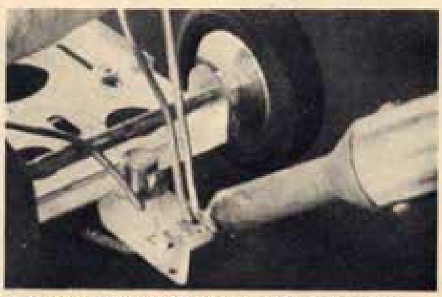
Gears are very, very important in enduro racing, and the TYPE gear you use plays a very important part in the difficult job of picking up an enduro trophy. I personally won't use anything but a set of bevels with an inline motor. The popular stamped steel gears are next to worthless, in my opinion, and there is far too much power lost using these type gears to even consider their use. Not only is the power loss too great, they are much weaker than a well designed bevel. The bevels even LOOK more mechanically correct, and the stamped metal gears in comparison look like they should be in dime store cars.

The motor pinion gear of course, does not move sideways, or up and down. It's positioning then, is easy. Just press it on the motor shaft carefully, and solder it if it is that type, or fasten it with a set screw. The large gear on the axle should be carefully slid into mesh with the pinion gear, so the teeth on the axle mounted gear does not "bottom" in the teeth of the motor (pinion) gear. Apply a light coat of grease to every other tooth of the gears and run the car on a test stand. It should spin freely, and quietly.

What is there left to do? Not much. Make sure your body is mounted solidly to the frame, and that all body accessories are securely mounted so you won't litter the track in the event of a roll-over. The body should be nicely painted and correctly detailed, just for the psychological boost if for no other reason.

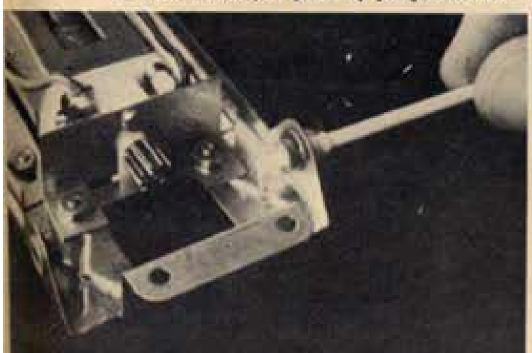
You now have a potential winner. Your driving of course will determine the outcome of the race, and you will have nights when you are "off" and nights when you are really "on" and would be capable of winning any race driving the track ambulance, if your car would stay together for the distance.

You can be sure it will stay together now. We just saw to that, didn't we? Go out there and win now, your car is ready and so are you.



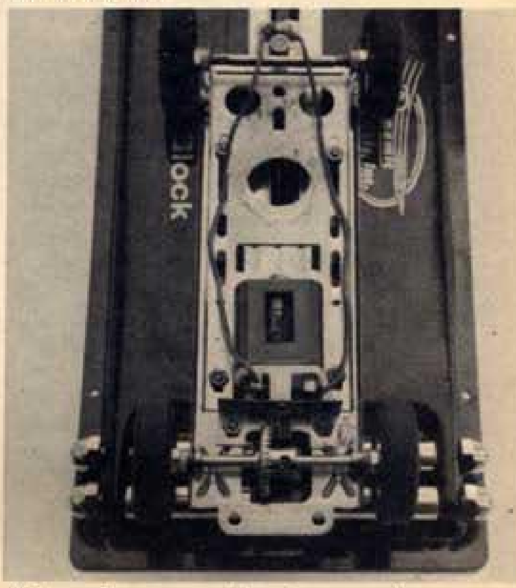
"Scrap the small screws that usually hold the motor wire to the brushes, and solder it instead."

"The bearings are simple, yet critical in the successful plan of preparation."

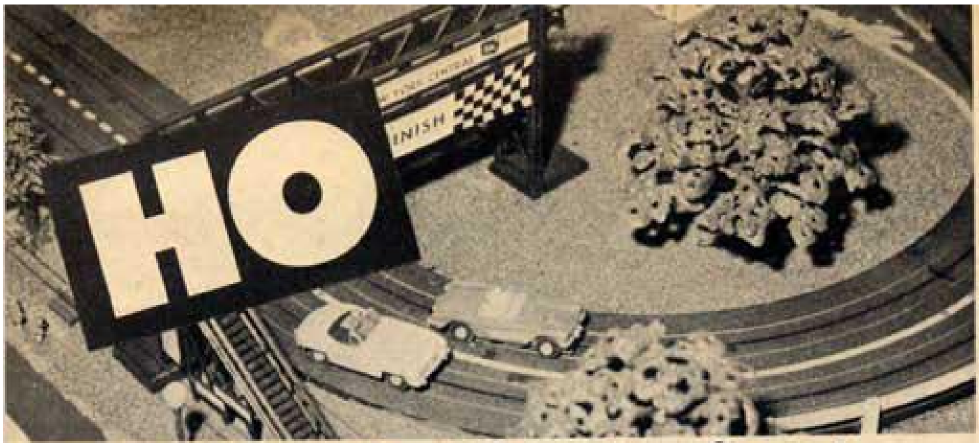


"Coat the threads with loctite."





"Fast and strong, and ready to race."



Car & Track Guide

By Richard Howard

CONTINUING its policy of keeping readers up to date on all phases of slot racing, Model Car Science presents this survey of three of the most popular 1/78th or H.O. scale cars and tracks: Aurora, Tyco, and Atlas. If you are planning on getting into H.O., this guide can help you get more enjoyment from it.

Starting with Aurora's Thunderjet 500, $2.98 rotary driven 12-18 volt DC car: It is a definite improvement in H.O. racing. The motor and chassis comes as a complete unit. Wheelbase is adjustable for length as well as height. Pickups are the usual brass spring-held type which are pretty well trouble free. Axles are interchangeable, front and rear. Wheels are chrome plastic. Transmission: Three metal gears transfer power to a plastic pinion gear. Body detail is second to none with chrome plated front and rear bumpers and grill, and excellent proportion which adds much to its realism.

AURORA ROAD TEST

The 500 is fast, as a matter of fact it's too fast for most road courses. Modifying must be done not to increase its speed but to increase its road ability. The front guide pin is weak and is usually the first thing to go. The commuter brushes can pop out of their mountings. However it must be said that Aurora has the best service manual and is the easiest car to work on. The rear end drifts easily going into turns because of the equal weight distribution. When full power is applied on the straights, it sometimes does wheel stands and deslots. Other than these minor faults, it is still one of the best slot racing values on the market today, and promises many hours of sheer fun.

RECOMMENDED MODIFICATIONS

Replace Aurora front pin with Tyco backup pin. Tape bottom of commuter openings to prevent loss of commuter brush. Weight front end with clay for better weight distribution. Install slick wheel and tires to prevent wheel stands.

TYCO CARS

Tyco's $2.98, 12-16 volt DC entry has the only front steering offered in H.O. cars. It may be replaced with a standard fixed front pin if you desire. This steerable front end adds greatly to its cornering ability. Drifts and slides can be controlled and you can come out of a corner much faster. The chassis has a fixed wheel base. Pickups are very reliable and can be interchanged to prolong their life. Tension can be adjusted by the spring ears that are a part of the pickup itself. Axles are not interchangeable and wheels are held in place by force-fit rather than the slotted axles on Aurora and Atlas. Wheels are gray plastic. A note here about tires: They are large diameter and very flexible and they certainly add to the car's road holding qualities. Transmission: A plastic worm transfers power to a plastic pinion gear. Body detailing is somewhat sketchy, no chrome. Wheel bases are all the same.

TYCO ROAD TEST

The Tyco, while being slower than the Atlas and Aurora, finished first in many races due to its excellent cornering qualities. A weight over the rear wheels makes it a forgiving "2" machine. Getting left on the straightaway is its worst drawback. An important note, the Tyco sometimes hangs up and will not run. DO NOT PUSH CAR FORWARD TO FORCE GEARS FREE, it's just as easy to pick the car up and move the exposed spur gear with your fingernail to free the transmission.

RECOMMENDED TYCO MODIFICATIONS

To increase speed, put Aurora slicks on the rear wheels. They will fit without any altering of the wheel. You can also operate the Tyco safely at 18 volts.

ATLAS CARS

The $2.98 Atlas car completes our review. It has a fixed wheelbase motor chassis unit that operates on 12-16 volts. Pickups are spring-held type. Axles are press-fit and are not interchangeable. Wheels are chrome plated plastic. Transmission: Power is relayed through a plastic drive and spur gear. Body detailing is good with chrome plating on most models. Of special note is the '36 Ford three window coupe and the '30 touring. Both lend themselves to customizing nicely. A hop up kit with gears is available to speed it up.

ATLAS ROAD TEST

The Atlas falls between Aurora and Tyco in speed and road-ability. Quiet and smooth running, she has a tendency to whip rather than drift in the corners, this is because of the high placement of the body weight and the short wheel base. She holds the corner a little longer than the other cars tested but when she goes — she really goes! Front pin is a bit thin. You can't adopt the Tyco backup pin to it but the Atlas backup pin will fit on the front, making things come out about even.

RECOMMENDED ATLAS MODIFICATION

The speed kit will bring its speed up and smaller Aurora tires on the front will make the car stick more on the corners.

SERVICE HINTS THAT APPLY TO ALL CARS

Clean Pickups	Hold pickups down with thumb and rub with rubber eraser until shiny.
Lubricate	Use castor oil. Apply with a tooth pick at axle supports and on spur gear. **Do not oil motor.**
Clean motor every 4 to 5 hours of operation	Remove body from chassis and clean motor with brush dipped in alcohol.
Keep tires clean	Use alcohol and cloth to clean tires as well as the track.

H.O. TRACK INDEX

This review covers the three most popular brands of track: Atlas, Tyco, and Aurora. By using this index, you can plan a constant growth type of layout that most train hobbyists use when building a track plan.

Question: Will H.O. cars run on different makes of track?

Answer: Yes. All slots are standard width and cars will run well on any track.

Question: Can different brands of track be joined together?

Answer: Yes. Both Atlas and Tyco market a roadway combining section that permits the use of Aurora sections. Remember you will need two sections to complete the job.

Question: Will 12 volt cars burn out if I use a higher voltage transformer?

Answer: You can easily use an 18 volt DC transformer for Aurora,

Tyco, and Atlas. Remember not to use AC transformers on DC cars.

Question: Will any speed controller work with my Aurora set?

Answer: Only if it is wired for H.O. motors 85 OHM winding.

Here are some maintenance hints to follow with all types of track:

Keep track away from direct sunlight	Any heat exceeding 120° can cause warping. Remember: black absorbs heat.
Keep track and conductor rails clean	Use a hard rubber eraser to clean rails and a small paint brush to clean slot and track surface. If you plan on a permanent installation use liquid solder to join rails.

Some don'ts to follow:

- Don't use lighter fluid, alcohol, or the like to speed up cleaning of rails.
- Don't use plastic glue to bond track together.
- Don't use water to clean track.

GENERAL TRACK TIPS

To join section of Aurora track together: Two metal pins are used to align the track and a joiner is inserted in a center hole to form a rigid unit. A note about the conductor rails: They must bend at the right angle or trouble will develop. If they are bent in too much it will result in no electrical contact: out too far, and the tension can break the soft metal joiner. The screw hole in track center permits permanent mounting to a base. Atlas: Brass slide in clips join the Atlas sections. The unit is flexible, permitting steep hill climbs, dips. (Note — If brass clip does not slide into track insert, use a knife blade to enlarge seam opening). No screw base mounting holes are provided in track sections. Tyco: Tyco is joined by a tongue and groove affair and it is a rigid unit when assembled.

H.O. TRACK INDEX

By using this handy index, you can plan your layout according to your budget and desires. If, for instance, you have an Aurora set and you wish to expand the layout to include a steep hill climb, you would use an Atlas roadway combining section at 79¢ and as many Atlas straights to complete the hill section. There are dozens of different combinations possible and this index can prove a handy track planner.

Note: X means that company does not manufacture this part.

STRAIGHT ROADWAY	ATLAS PRICE	AURORA PRICE	TYCO PRICE
9″ Straight	49¢	49¢	49¢
6″ Straight	49¢	X	X
7″ Straight	X	49¢	X
5″ Straight	X	49¢	X
3″ Straight	39¢	X	X
CURVED ROADWAY			
15″ Radius ⅛ circle	59¢	X	X
12″ Radius ⅛ circle	59¢	59¢	X
9″ Radius ¼ circle	59¢	59¢	59¢
6″ Radius ¼ circle	49¢	49¢	49¢
90° 2 lane intersection	$2.98	$2.49	X
90° R.R. Crossing	$2.98	$2.98	$2.98
9″ Straight Lap Counter	$1.49	X	X
9″ Crossover Roadway Pair	$2.50	$1.98	X
Junction Turnoff Pair	$4.98	$4.95	X
9″ Chickane	59¢	X	X
Roadway Combining Section	79¢	X	N.A.
Remote Traffic Circle	N.A.	X	X
9″ Terminal Straight	98¢	98¢	98¢
Pit Stop Turnoff Pair	X	$4.98	X
Single Lane Curves and Straights for Pit Stop all	49¢	X	X

SOUPING Your STROMBECKER

3 Simple Steps for More Speed



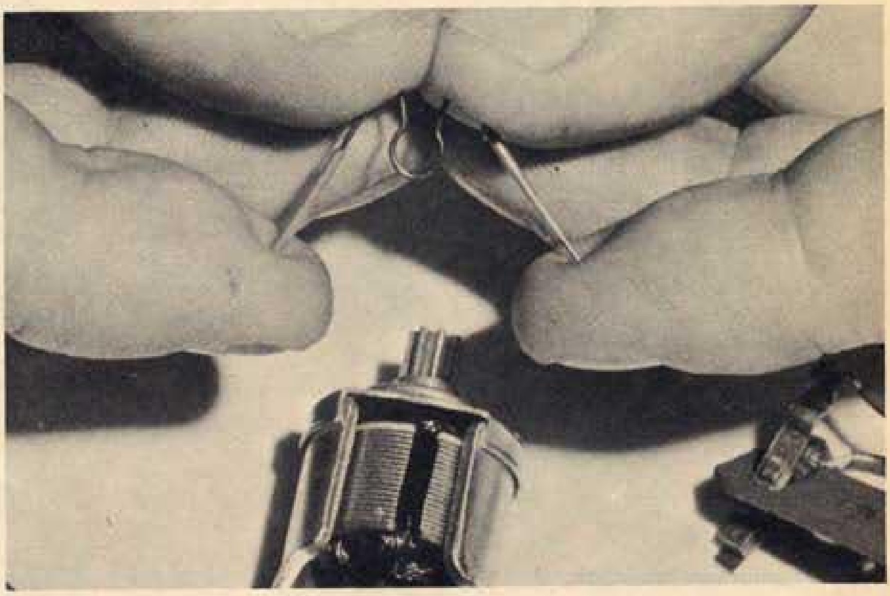
Apply slight outward pressure to the spring.

Aside from breathtaking realism and authentic racing action, it's still speed that keeps road racers coming back for more. How can we get more speed out of the motors that power our cars? That's the question — and here's another answer from Strombecker, the company that pioneered model road racing back in 1959.

Just to show that there are easy solutions to speed, speed and more speed, try this little trick — while the motor is running, apply a slight outward pressure to the spring (picture #1). If the pressure causes the motor to "rev up" and deliver increased rpm, you know you can get more speed simply by tightening the brushes against the armature. Here's how you do it. First, remove the screw that holds the spring and brushes in place (picture #2). Now, take the spring and gently but firmly spread the ends to increase tension and, in turn, tighten the brushes against the armature. That's all there is to it. Reassemble the motor and you're in for speed and more speed.



Remove screw that holds spring & brushes.



Spread the ends to increase tension. This tightens the brushes against the armature.



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SLOT RACER'S Work Shop

NEW IDEAS IN RACING MODIFICATIONS

HOW TO STOP YOUR DRAGSTER

By George G. Siposs

Dragsters are paradoxical. You spend endless hours and many dollars to make them traverse the scale ¼ mile course in the least possible time, then you have to spend more time on working out a system to stop them effectively. If the rig does not stop fast enough, it becomes a tangled mass of tubes and other parts and the vicious cycle has to be repeated again.

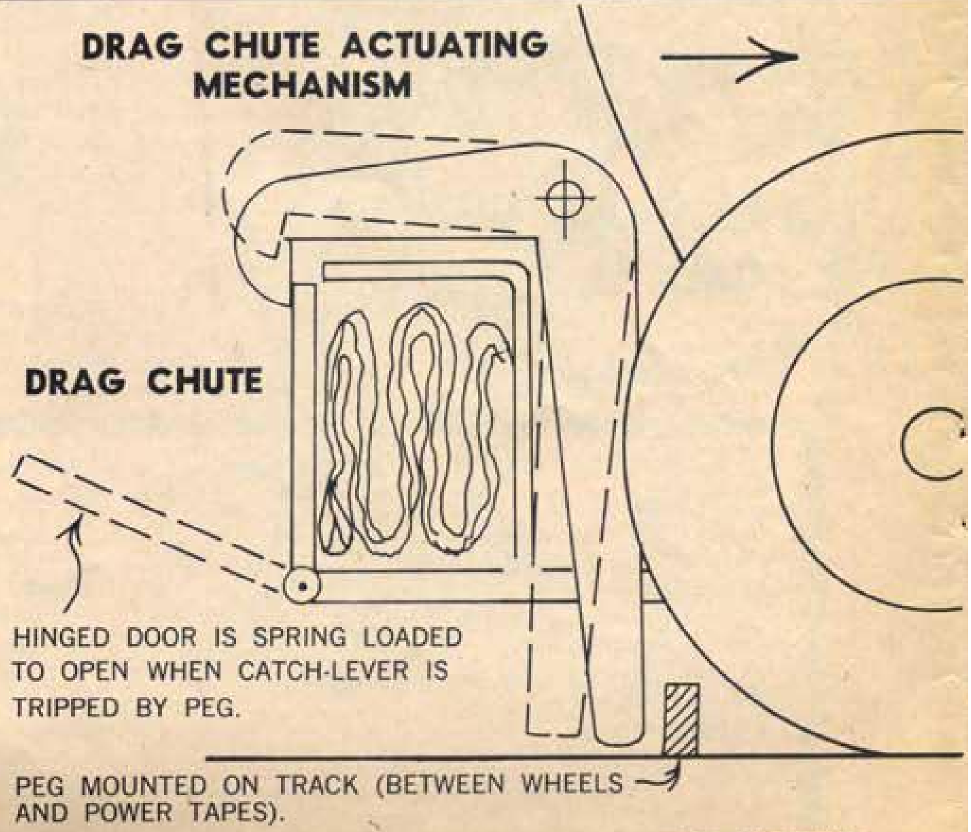
Many articles have been written by various experts (as no one will deny that it takes a real expert to achieve prominence in this exciting field) on how to make your car go fast. This article will deal with a subject of no less importance: how to stop the car safely in a short distance. There are several methods possible. You will have to make the choice yourself to suit the conditions on the track and on your car.

Regardless of the method you choose, the end of the track should have a soft, padded spot to cushion the cars and to serve as a reserve in case the brakes fail. The padded part may consist of small foam rubber scrap contained by a net. Here in California, one can

FRICTION STOP METHOD

AT END OF DRAG RUN, TWO 2 FT. LONG BLOCKS LIFT CHASSIS 1/16" ABOVE TRACK.





see many a course where the padding is simply an old parachute folded up loosely at the end of the table. Regardless of what you use, make sure that no foreign matter can enter into the intricate parts of your dragster. To limit the deceleration forces to a safe value, the padding should be soft enough to allow cars to come to a full stop in no less than three feet. The force in this case will be in the neighborhood of one "g."

At the end of the run, the dragstrip should have the two power tapes shorted to allow dynamic braking. Provision can also be made to introduce reverse polarity current into the deceleration zone power tapes, provided the motors are built to withstand the tremendous electrical loads they can encounter after being subjected to a full 36 volts in the opposite direction.

Some means of mechanical braking can also be built into the track to prevent damage (electrical) to the motors. If the bottom of the car had a small strip of sand paper cemented on in suitable areas, a ramp could be built beside the power tapes to allow the car to run up on it. The ramp is just high enough to lift the car until the wheels just clear the track. The dragster will then come to a screeching halt with its wheels spinning about 1/16" off the track.

The most realistic method of course employs a drag 'chute. A silk parachute approximately one foot in diameter is mounted on the back of the car sufficiently low so that the force exerted by it will not lift the front wheels off the track during the stopping. The parachute can be actuated either electrically or mechanically. If a third power tape is laid beside the slot and a third pickup is incorporated into the fallaway pickup, an electrical impulse can be sent to a solenoid built into the car which will trip a lever releasing the chute just past the traps. This system adds weight to the car so perhaps a mechanical system offers the best choice. A peg, extending approx. ¼ inch from the track surface just past the traps, can be made to trip a lever which is normally spring loaded to release the chute from its packing. The pressure exerted by the packed chute keeps the lever in the closed position during the drag run. Several methods can be worked out by an ingenious modeler to hold and then release the chute when desired, all actuated by simple mechanical levers.

As a sidelight, we should mention that a most appreciated touch is a separate slot beside the dragstrip which has low voltage fed into it to return cars to the starting line after safe deceleration.

* Cream of the '64 Car Crop

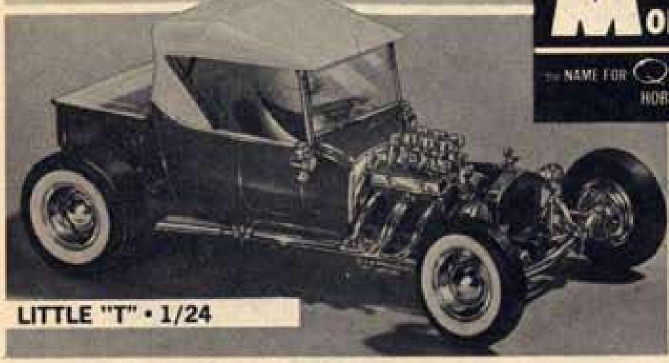

'40 FORD • 1/24


LI'L COFFIN • 1/24


'58 THUNDERBIRD • 1/24


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Dynamic News
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Vol. 2, No. 1 | Van Nuys, California | January, 1965

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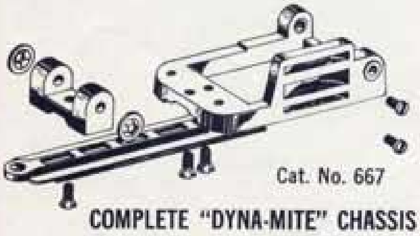
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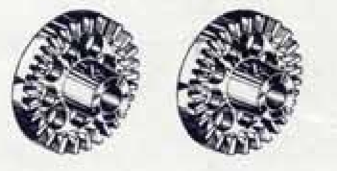
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